



3 100 765 052 9

STORAGE



MACDONALD COLLEGE
LIBRARY

630.5

+ M1354
V. 4.

Accession
Number

58175

DATE

Apr. 1962.



58175



MACDONALD COLLEGE JOURNAL



VOLUME 4
No. 1



SEPTEMBER
1943

Farm · Home · School



EYES RIGHT!

Twenty per cent of all school children have faulty eyesight. Forty per cent of college students have defective vision. Ninety-five per cent of men and women over sixty have imperfect eyesight.

There is little that can be done for the twenty per cent who begin with poor sight, but twenty per cent from ninety-five per cent leaves seventy-five per cent whose defective vision is acquired largely by overstrain through inadequate lighting.

Better light means better sight. Have an adequate number of lamps to chase away the annoying shadows—arrange them for easy reading and proper diffusion. Avoid glare.

THE
Shawinigan
WATER
& POWER COMPANY

a Salute to Quality



SINCE 1858

The MACDONALD TOBACCO COMPANY

*Canada's Largest Independent Manufacturers
of Tobaccos and Cigarettes*

THE MACDONALD COLLEGE JOURNAL



This journal is owned, edited,
and published monthly by
Macdonald College.

For advertising rates and
correspondence concerning the
advertising section write to the
Advertising Representative.

BOARD OF MANAGEMENT

Chairman

W. H. BRITTAİN, PH.D.

Circulation Manager

L. H. HAMILTON, M.S.

Business Manager

T. F. WARD

Editor

A. B. WALSH, B.Sc. (Agr.)

Associate Editor

H. R. C. AVISON, M.A.

ADVERTISING REPRESENTATIVE

E. GROSS

6381 De Vimy Ave.

Montreal

Telephone ATlantic 4739

All correspondence concerning
the material appearing in the
MACDONALD COLLEGE JOURNAL
should be addressed to

THE EDITOR,

Macdonald College, P.Q.

Subscription rates — 50c per year

EDITORIAL COMMENT

At no time in our recent history has the question of adequate supplies of feed for our livestock and poultry assumed such great importance as now, for never before have our farmers and poultrymen attempted a task of such size as that taken on for the feeding season of 1943-44. The immense volume of live stock products needed to meet civilian and army requirements in Canada and the vast commitments that Canada has made to Britain and others of the United Nations brings Canadian agriculture into the classification of war industries. And basic to the production of these needed supplies of animal and poultry products is the whole problem of adequate supplies of feed.

Because of seasonal and climatic conditions the crop of silage corn is spotty in certain areas, but in many districts recent reports indicate prospects of reasonably good yields. The bright spot in the feeding picture is the hay crop; taking Canada as a whole, the hay crop this year is probably one of the best.

Another asset of immense value to Canadian feeders at this time is the ample supply of feed grains in Western Canada, but large as this store of feed grain promises to be it will probably be none too great for safety. Much more wheat and coarse grains will be fed in the Prairie Provinces than ever before. From the standpoint of feed grain supplies, the part of the country in the most vulnerable position is Eastern Canada, where serious shortages are bound to occur unless advantage is taken of every opportunity to move into position the vast quantities of Western grain required.

Various steps have been taken to make this movement possible. Delivery quotas have been arranged so as to encourage the early shipment of coarse grains rather than wheat. Additional labour has been provided at the head of the Lakes to speed up grain handling. The shipping problem has been examined and further plans made to facilitate movement of grain by water from the Lakehead to the bay ports on the Upper Lakes, to be forwarded by rail to terminal elevators farther East. Finally, arrangements are being made to move grains direct from shipping point in the West to destination in the East, provided they are cleaned down to a certain dockage tolerance before shipping.

All these measures can be effective if everyone realizes the importance of taking steps *now* to secure as great a proportion of the feed grains they expect to need this winter and next spring.

It cannot be too strongly urged that those in Eastern Canada who expect to need grain for feeding should not only place their orders early, but also be prepared to accept the kind of grain they can get, whether it be wheat, oats, or barley — and when they can get it.

A WAR PRODUCTION PROGRAM FOR CANADA

by Frank Shefrin

The rapid change that occurred in the food situation made it necessary to take stock of Canada's position and make plans for 1943 that would insure maximum output. Food was needed to feed our armed forces and civilian population, to meet commitments to the United Kingdom, and demands of the remainder of the United Nations. Canada also had to be prepared for the task of aiding in providing food in the areas won back from the enemy. A special committee was set up in October 1942, representative of the Agricultural Supplies Board, the Wartime Prices and Trade Board, the Post-War Reconstruction Committee and the Department of Trade and Commerce. The purpose of this Committee was to determine the food requirements, domestic and export, and to set the nation's production objectives.

The Committee worked out agricultural objectives for 1943 — the largest production drive in the farm history of Canada. These objectives were presented for approval to representatives of the provincial Departments of Agriculture and representatives of farm organizations who met in Ottawa in December 1942. Although programs and policies had been discussed with provincial government representatives and with officials of farm organizations from time to time, this was the first time that specific over all production objectives had been set up as guides for farmers in making their plans for the new year.

After the national goal for each product had been broken down into provincial goals, the latter in turn had to be broken down into municipal and county goals. Then each farmer had to determine what he could contribute to attaining the desired goal. In order to do this, the provincial governments, the farm organizations and farmers got together and worked out farm programs. The story that follows tells briefly of some of the way and means whereby this was accomplished.

The Maritime Provinces: Prince Edward Island has an Agricultural Supplies Board consisting of government officials and leading farmers. In Nova Scotia the Agricultural Advisory Committee, the Extension Service, particularly the Agricultural Representatives, the county farm organizations and municipal councils are cooperating in attaining the production goals. The province of New Brunswick has established an Agricultural Advisory Committee composed of provincial and dominion agricultural officials as well as representatives of farm organizations.

Quebec: In Quebec local committees have been organized in 950 districts. These Committees work in close cooperation with the Agronomes and local representatives of the Provincial Intensive Production Committee. This Committee is composed of officials of the Department of Agriculture as well as representatives of the different agricultural schools and agricultural organizations.

Ontario: Ontario, in addition to other committees, has set up County Agricultural War Committees in each county wherever possible. The Agricultural Representative is secretary of these County Committees.

Manitoba: In Manitoba the rural municipality acts as a local unit, and Committees have been organized in each municipality. The Committees organized meetings, district conferences, etc. In addition, various farm organizations, Women's Institutes, and others assisted.

Saskatchewan: Saskatchewan has organized "Win the War Committees". Each rural municipality was asked to organize one of these Committees. The Committees have the cooperation of various farm organizations. One of the first jobs assigned to these Win the War Committees was that of taking an agricultural census of Saskatchewan to determine the need for more farm labour where such a need exists, and to discover surpluses of farm labour if any. A survey was also made of farm machinery, prospective crop acreage, and animal production. Information and suggestions on production matters are sent to the Committee members from time to time.

Alberta: In Alberta there is a "Farm for Victory Program". To implement the program the province was divided into 28 districts or zones, in each of which there was to be a "Zone Farm for Victory Committee" composed of 8 or 10 representative farmers and leaders of farm organizations. The District Agriculturalists act as secretaries for the committees. Each zone, in turn, was divided into a number of Community Farm for Victory Committees which deal with local problems. The personnel of the Community Committees are farmers and representatives of any farm organization whether commercial or educational, and also includes representatives of Farm Women's Organizations, School Boards of Trade, Parent Teacher Associations, and other organizations of this kind.

The duties of the Community Committees are briefly: to explain the Program; to find out from each farmer his production program; to bring about the maximum use of all farm machinery and equipment; to bring about an effective distribution and use of available man power; to organize campaigns to eliminate insect pests, livestock diseases, noxious weeds; to eliminate unnecessary losses of young animals; to better feeding practices; to work out a plan to continue production.

British Columbia: In this province the Agricultural Production Committee set up a week after the outbreak of war has directed the production objectives campaign. This committee consisting of government officials has established farmer-contacts through the Farmer's Institutes, as well as the Women's Institutes.

In all of the nine provinces public meetings, personal contact, the radio and the press are the usual means of spreading information about the production objectives.

GET **ALL** THE VALUE OUT OF
YOUR TRACTOR RATION PERMIT

Choose a
COCKSHUTT
"70" TRACTOR



• This popular, year around farm worker is engineered and built . . . from the ground up . . . to do big work at low cost. The "70" is powered by a smooth-running 6-cylinder engine which provides a steady flow of over-lapping power. That means real performance, smooth, quiet operation and fuel economy.

The skilful design of the "70" results in less weight per horsepower. What weight there is is evenly distributed to put every pound to work giving solid traction and stability. The compactness, ease of operating, steady power, convenience and assessibility of the "70" make it the

popular tractor of its size and type . . . the best all around value your money can buy.

JUST CONSIDER THESE FEATURES

- The "70" has a rugged, efficient transmission... a high standard of quality, easily operated.
- Long - wearing gears and shafts designed to stand up under rough going.
- Has every possible feature to assure operator comfort and ease of handling on longest operations.
- Power take-off attachment available at extra cost.
- Has sturdy, widely adjustable, swing type drawbar.

Sale of farm implements is still limited by Government Rationing. But farmers whose need is urgent may secure Permits through their local Farm Implement Rationing Office. Consult with your Authorized Cockshutt Dealer. Find out if you are eligible. Don't wait until it is too late to buy for use this year.

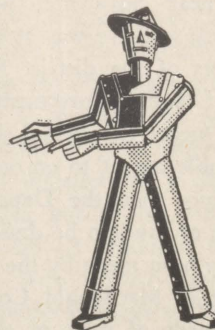
COCKSHUTT

PLOW COMPANY LIMITED

BRANTFORD, ONTARIO

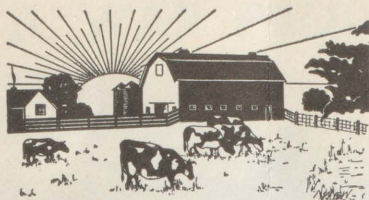
SMITHS FALLS • WINNIPEG • REGINA
SASKATOON • CALGARY • EDMONTON

COCKSHUTT PLOW QUEBEC LIMITED, MONTREAL, QUEBEC
COCKSHUTT PLOW MARITIME LIMITED, TRURO, N.S.



1839 • Leaders for Over a Century • 1943

*Prepare for tomorrow!
Keep on buying War Savings
Certificates on the
Cockshutt War Savings
Plan regularly!*



AGRICULTURE

Articles on problems of the farm

UNDERDRAINAGE

A Great Boon in 1943

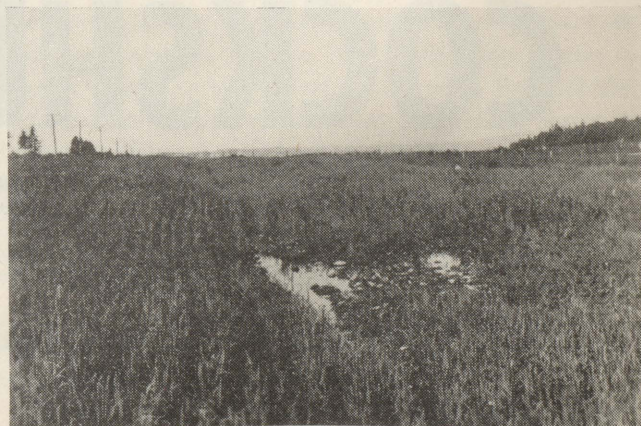
The year 1943 will long be remembered by farmers as an exceptionally wet one, when practically all land not naturally well drained produced only poor crops or no crops at all. Unfortunately, much of the agricultural land in Quebec suffers from lack of drainage, even in normal years. In a year such as this the loss of crops due to lack of drainage is sufficient, in many cases, to pay for complete underdrainage of such land in one year. The practice of tile draining farm land in Quebec is not widespread, largely because there has been prevalent for many years the belief that the first cost of these installations is too great for agriculture to bear. Those with experience in underdrainage do not look at it in this way, however. Instead they look at underdrainage as an investment, the returns for which are so high that, where underdrainage is needed, they feel it would be unwise to do without it.

That part of Pontiac county of which Shawville is the centre, has perhaps more and longer experience with underdrainage than any other part of Quebec province. There has been in existence a tile and brick yard at the town of Shawville for about 50 years, so that farmers in that district early became acquainted with the use of tile drains in the improvement of wet lands. There are therefore many farms on which there has been a certain amount of tile drainage for a great number of years. In 1929 Mr. Earl Fulford, a farmer near Shawville, bought a traction ditching machine because there was at that time a definite demand from farmers of the district for increased installation of this form of land improvement. The department of Agriculture at Quebec subsidized the purchase of the machine to a reasonable extent to encourage this form of drainage, and ever since then the Department has been providing free surveys of land to be drained. Practically all of these surveys have been made by the Department of Agricultural Engineering at Macdonald College, and to date, surveys have been made of parts of about 80 farms in the townships of Clarendon and Bristol alone. The great majority of land surveyed for this purpose has since been underdrained. Before the depression stopped the work in 1932 there had been installed by this machine not less than 50 miles of tile drains, which were distributed among some 64 farms of these townships.

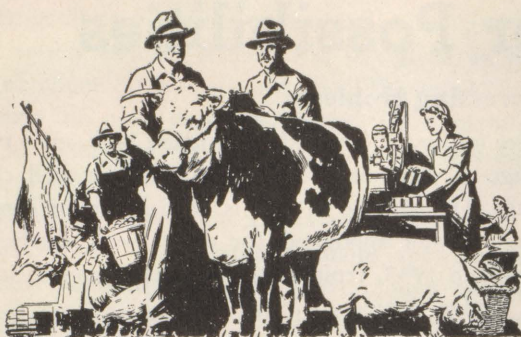
by L. G. Heimpel

During the period of low returns for farm products prevailing from about 1932 to 1936, little work was done in this district. Since then, however, work has again been resumed, and to date, the machine's total mileage of accomplishment is very close to 100 miles. This is a tremendous amount of underdrainage which certainly has increased the profits of farmers on whose farms the drains are located. It is a safe estimate that, at present costs of underdrainage, the average yearly return for the investment in tile drainage is from 15 to 20 percent of the cost. This means that the cost of tile drains on wet lands of reasonably good quality will be returned in increased crop yields in from 5 to 6 years. Many authorities on the subject claim larger returns, and we know of plenty of cases where farmers themselves have reason to believe that the cost of the drains comes back in one year. However, we prefer to be conservative in our estimates of the returns of drainage investments because, even then, tile drainage is a very good proposition.

It is peculiar that Pontiac county, the area in which tile drainage has become so popular, should be the scene of so much of this activity, because it is not a flat land area. The contour of most farms of this district is rolling, yet there is sufficient need for underdrainage, even in this kind of land, to make underdrainage very popular once its value becomes established. Most of the drainage done is of the selective type. That is, drains are put in water courses and low areas of fields which usually hold back



Only underdrainage will cure such wet spots. "Planche bombée" will not do it.



Food for War

Preserved, Packed and Shipped

Thousands of Canadian men and women are doing a most necessary job of converting farm products to transportable food for millions of fighters and civilians overseas. Much credit is due those working in canning, dehydration, curing, packing, refrigerating, and shipping. With war industries and their workers the Bank of Montreal is working helpfully by supplying the kind of banking service suited to the times.

BANK OF MONTREAL

ESTABLISHED 1817

MODERN, EXPERIENCED BANKING SERVICE . . .
the outcome of 125 years' successful operation



TODAY, amid the stresses of all-out war production . . . the electrical industry looks forward to the day of Victory, when it can carry on the task it has begun . . . the establishing of a higher standard of living for all the people of Canada.

Westinghouse

Electrical Products for Home and Industry

Canadian Westinghouse Company Limited
 Hamilton, Canada

spring seeding of the field as much as 10 days or 2 weeks unless tile is installed. Though the greater portion of the drainage in Pontiac county is of this type, there are also occasional flat fields in which systematic drainage is necessary and some of these fields have given a very good account of themselves this year. We are publishing a photograph of a field of oats on the farm of Mr. Harold Cuthbertson on the Front Road near the village of Bristol. The writer made a survey of this field in the spring of 1942. Though this was a normal spring and summer, from the standpoint of rainfall, the field was very wet and cattle on pasture were punching the ground full of holes in the month of June in most parts of the field. The system of tile drains was installed in the fall of 1942, and this year's is the first crop grown after drainage. The result is shown in the fine crop of oats this field has produced and it is safe to say that without tiling, it would have been impossible to seed this field to grain at all this year. A similar field of grain was visited by the writer on the farm of Mr. Orval Smart southwest of Shawville. This also is a flat field which, even in a normal year, gave trouble in spring due to excessive soil moisture. The drains were installed in the fall of 1941 and both crops since produced have been of the bumper type. Without tiling, however, it is doubtful whether this field could have been seeded sufficiently early this year to make ripening of grain possible.

Surface Drainage Not Enough

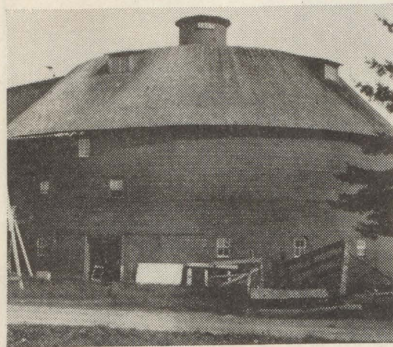
Many farmers are under the impression that once standing water has been removed from the surface of farm land, such land is well drained. This is far from being the case. In order to produce good crops standing water must be removed from **within** the soil. This can be accomplished only by tile drainage or underdrainage as it is usually called. In flat land, and in low areas of rolling land, the soil is often saturated to a level very near the surface of the ground for the greater portion of the early growing season. The result is that soil is much too cold for the rapid growth of plants necessary to the production of good crops. Also, most farm crops require much greater depth for root development than is available on such poorly drained land. The lateral drains or gathering drains in a drainage system are usually installed at a depth of 30 inches from the ground surface, and at this depth, a much greater depth of water-free soil is produced than would be available for the plants with surface drainage only. One of the crops for which underdrainage will undoubtedly be found absolutely essential in this Province is sugar beets. We have large areas of land in this Province which, from the standpoint of fertility and physical quality of the soil, would be admirable for sugar beets, but it is very doubtful whether first quality beets can be produced

(Continued on page 11)

Farming Does Offer Possibilities

Labor and Production are the pressing problems

by L. H. Hamilton



The Round Barn, built in 1897.

he has a tremendous labor problem, but on the whole he will get by. The big problem is production and more production.

"Farmers are working harder and actually doing more than they have ever done, but will it be enough?" he questioned.

Mr. Hodge is one of the good farmers of the Eastern Townships. He is known over a wide area for his good farm practice, his originality and keenness, and his interest in community activity. He is one of the many young men who entered College in 1914 but after a period at Macdonald enlisted in the army. He went overseas and upon his return found the home farm very much in need of help, so he turned to and has remained there ever since. This was the natural course to follow for two reasons, the first, because the farm was there more or less waiting for his return and second, because it offered all the possibilities necessary to satisfy an enquiring outlook.

Mr. Hodge happened to settle at Cookshire because his father, who was forced to give up his engineering course at McGill because of ill health decided to buy the home farm. In spite of many natural handicaps Mr. Hodge has established one of the best farms in the Eastern Townships.

The Farm is well Organized

There are a number of interesting features about the Hodge farm. It is just a little larger than the average there being 115 acres under cultivation with additional pasture land. It is located off the main highway about two miles east of Cookshire. The soil in this district is reasonably productive but the growing season is fairly short. There is a small local market for some crops but the bulk of the production has to be taken to Sherbrooke some twenty miles away or shipped to Montreal. In developing this farm two main points were emphasized. The first was that since the farm is the home it should be attractive and comfortable. The buildings and surroundings were

"It doesn't matter much, so long as we keep on winning the war", was the reply of Reginald Hodge, Cookshire, when asked if farm prices were satisfactory. "Of course," he added, "the farmer is not getting quite what he should and

therefore improved. The red brick house built some twenty years ago is substantial and surrounded by well chosen plantings. The barn 36' x 108' is of plank frame construction and is well appointed for doing work easily. This barn, built in 1933, replaced the original round barn built by Mr. Hodge, Senior.

Careful planning paid dividends

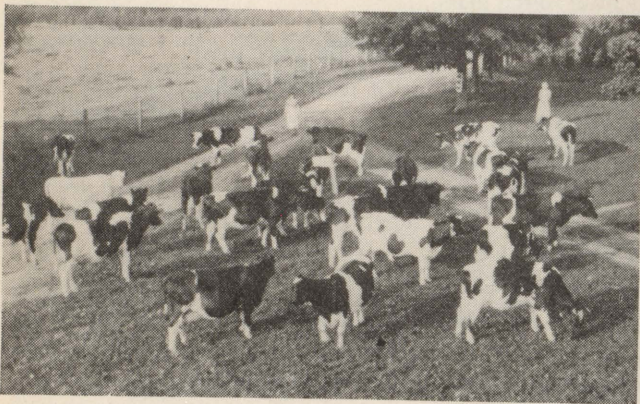
The second point was to develop a system of production which would permit a respectable livelihood. This required considerable study and planning. Building up the soil offered one of the biggest problems since clover and alfalfa did not germinate or come through the winter well. A four year rotation was established and artificial fertilizer purchased regularly to improve the fertility. This short rotation permitted considerable cultivation to control weeds and build up the fertility but the results were still unsatisfactory until Mr. Hodge decided to grow his own grass seed. This not only provided seed for the farm which resulted in a satisfactory crop but it also added additional revenue. Last year Mr. Hodge had some 800 pounds of clover seed to sell which at prevailing prices proved a profitable side line. The growing of this clover seed necessitated the further practice of ensiling the early cut clover, which practice has not as yet become very general in the district. It was explained that the first cut has to be made in June if a satisfactory crop of seed is to be had. At this time making hay is practically impossible so Mr. Hodge has been ensiling it for more than 20 years. For a time it was put in the silo without molasses or acid but this silage though satisfactory in some years was unsatisfactory in others and quite often produced a taint or off flavor in the milk. Cropping intensively involved considerable work and Mr. Hodge was not long deciding that more machinery was necessary. He still has his original tractor in which he uses fuel oil instead of gasoline. "This provides 1/3 more power and of course is much more economical", he stated. He has also added other larger and more efficient machines for operating with the tractor.

Weeds have always been a big problem. Some plan had to be developed for their control. Early summer cultivation helps, but buckwheat is unsatisfactory as a follow up crop in that district. Other crops were tried but the most satisfactory results were obtained from a mixture of oats, peas and Japanese millet sown at the rate of about three bushels of oats and peas and 15 lbs. of millet per acre about the first of July. The millet is sown from the grass seed box. This crop is cut with the binder before the millet heads appear and is put in the silo for winter feed. Usually the peas are just past the blossom stage and the oats nicely headed out.

The grain crop consists of oats and mixed grains. The Erban variety of oats is used and has given an average yield of about 50 bushels per acre. The mixed grain is a mixture of oats, peas, and wheat. This mixture will yield 50 bushels of 50 lbs. per acre and makes excellent feed.

Holsteins are favoured

For livestock Mr. Hodge maintains approximately 20 well bred Holstein cows. His herd averages over 12,000 lbs. and has a good test. The herd has been built from three original cows which were purchased. One of these, a 20,000 lb. cow with a 3.76 test was bought for \$80. from a district close by. The others, which had official tests of over 23,000 and 24,000 lbs., were also purchased in the Eastern Townships. The whole milk is being shipped to Sherbrooke and this leaves little opportunity for the production of pigs or poultry. The calves are all raised.

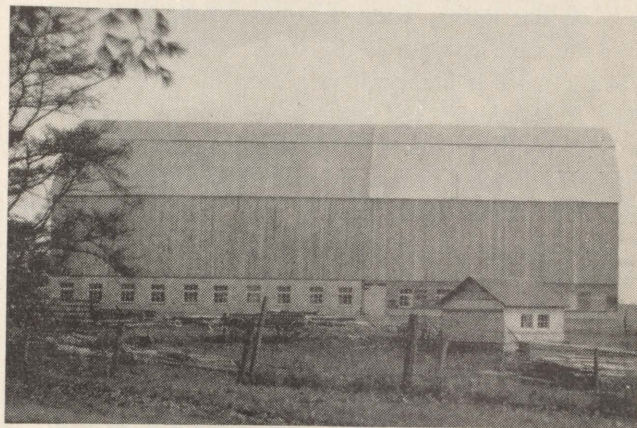


The dairy herd has been carefully built up

The bull calves are sold locally for the most part while the heifers are raised for replacements and sale. On the average up to 12 head of cows and heifers are sold annually, the majority going to the United States.

Calf feeding with a small amount of milk has not offered much difficulty. Whole milk for a period, followed by water, a good calf meal and well cured hay keeps the calves thrifty and growing well. It should be mentioned however that clean quarters and proper housing are given proper attention.

Yes, farming does offer opportunities. It is possible to farm successfully by studying one's problems and attacking them intelligently. With the increased use of machinery the farming of tomorrow can also be made a glorious adventure in which one enjoys the luxury of independence without the drabness and drudgery that were once, all too much, a part of the life of the land.



The new barn is modern and well built.

APPLES AND APPLE PRODUCTS FOR CATTLE FEED

For a considerable period, several experiments have been conducted at the Dominion Experimental Station, Kentville, Nova Scotia, on using of apples, and various apple products, as a feed for cattle.

When not on pasture, it is desirable for cattle to have some green succulent feed, and apples or apple products may replace either in whole or in part the customary use of such products as turnips, mangels or corn ensilage.

Many farmers in apple producing areas know that fresh apples can be fed to cattle to advantage. They should be cut or sliced in the regular pulper, and may be fed at about the rate of 2½ pounds per day for each 100 pounds liveweight. When apples are stored for feeding purposes they should be allowed to mature, before feeding. That is, the autumn apples should be fed first and the winter apples later in the same order that they are utilized for human consumption.

Drop apples and culls may be made into a good ensilage. They should be run through the corn cutter together with a certain amount of hay, to absorb the excess juice, and

packed in a silo. As a rule from 12 to 20 per cent hay and from 80 to 88 per cent apple makes a good mixture. Both timothy hay and clover hay have been used satisfactorily in this manner at Kentville. In British Columbia, straw has been used. The ensilage is palatable and compares favourably with good corn ensilage. It may be somewhat more acid than corn ensilage, and to remedy this, it is desirable, though perhaps not always necessary, to sprinkle in the silo, as it is being filled, ground limestone at the rate of three to four ounces per barrel of apples.

An excellent ensilage may be composed of two-thirds pomace and one-third skins and cores. These may be packed in the silo in layers, two loads of pomace and then one load of skins and cores. This makes an excellent feed, highly palatable, without waste, and of the right physical consistency.

In ensiling apples and apple products the material should be packed in the silo as well as possible; this, of course, being applicable to all kinds of ensilage.

Late Blight and Rot of Potatoes

by John G. Coulson

Late blight and rot of the potato is very prevalent and is causing much damage this season in Quebec. Special care in harvesting and storing this year's potato crop should be taken in order to keep rot of the tubers at a minimum.

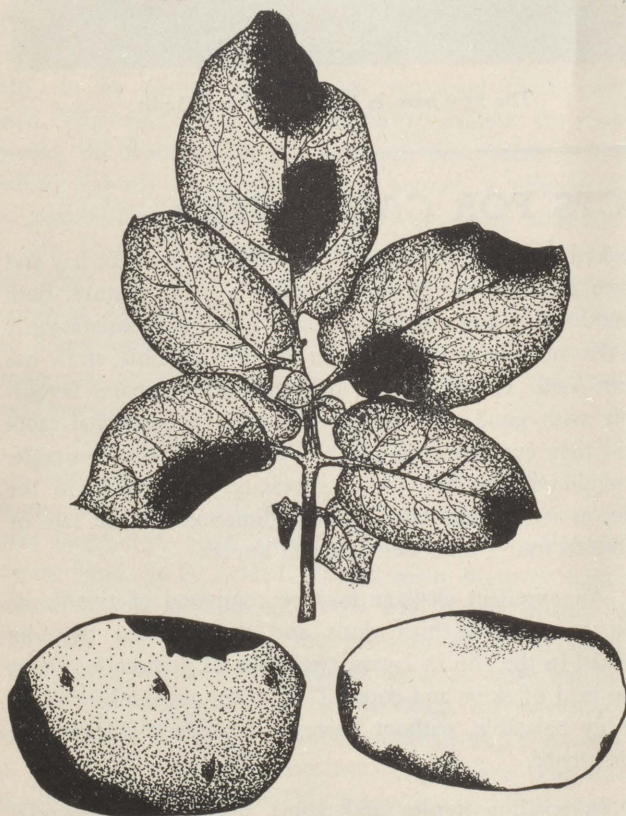
Late blight appears on the foliage as dark brown to black dead areas which usually originate at the tips and margins of the leaves. Under warm, humid, wet conditions these areas increase rapidly in size and number. When the disease is severe, the leaf stalks and stems may become involved. Thus all the plants in an entire field may be killed within a few days. This blighting is caused by a microscopic fungus or mold which grows through the living tissues of the leaves and stems and kills them. The fungus produces spores on the under-surface of the dead areas on the leaves. These are microscopic bodies which serve the same purpose as the seeds of the higher plants. When a spore is immersed in a drop of water for a few hours it germinates and starts a new fungal growth like the one which produced it. If this happens on a potato leaf, stem or tuber, a new infection arises. The spores are spread by various agents such as wind and splashing rain. In this way, the blight is spread from leaf to leaf, and from plant to plant. Rain water may carry spores down through the soil and bring them into contact with the tubers. This happening leads to tuber infection which re-

sults in the development of a brown rot originating immediately below the skin of the tuber. Rotting of the tubers in the field is more common in heavy than in light sandy soils. If a field with living blighted vines is dug, the spores of the late blight fungus become spread about by the harvesting and sorting operations and much tuber infection which leads to decay in storage may result, particularly if the tubers have not been dried before being placed in storage. Infections originating during harvesting usually account for the major portion of the rot which develops in storage. Hence the importance of the measures designed to prevent these infections. When conditions are dry and cool, infected tubers decay slowly with a brown rot which is usually dry. Under wet warm conditions, the tubers decay rapidly and are likely to develop into a soft, foul-smelling rotten mass.

Blight can be prevented

A number of means of reducing losses from late blight are known. Blight-infected tubers give rise to blighted plants, so such tubers should never be used for planting or placed on the cull pile, which is often a source of trouble in this respect. Such tubers should be destroyed by burning or buried deep in a hole in the ground. Good control of blight can be obtained by spraying the growing crop with a 4-4-40 Bordeaux mixture, beginning when the plants are about 6 inches high. The foliage should be kept covered with spray, which will require an application every ten to fourteen days, depending on the weather. Dusting with a copper-lime dust is about as effective. Spraying or dusting should be continued until the vines have reached full maturity. A thick layer of soil over the tubers should be maintained by hilling or ridging in order to provide protection against tuber infection.

It is, of course, too late now to make use of the above measures for this season's crop, but an effort should be made to avoid tuber rot as much as possible. Blighted fields should not be dug till fourteen days after the tops have completely died. Delayed digging usually leads to the least amount of harvest infection and the smallest amount of storage rot. However, it has been claimed that early digging of fields in which the amount of tuber rot is high, may be preferable to late digging in wet seasons. This is particularly true if the soil is wet and poor drained or the tubers are not well protected by a thick covering of soil. These are conditions favouring development of rot on the tubers while they are in the soil. If early harvesting appears advisable, the vines and soil surface can be sprayed heavily with a strong solution of copper sulphate, containing 15 to 20 pounds of copper sulphate in 100 gallons of water. This will kill the vines and the spores which may be on the ground, and thus hasten the time when harvesting can be



Early symptoms of late blight on potato leaves, and external and internal symptoms of rot on tubers.

(Continued on page 15)

The Sherbrooke Show is Next

For beef producers the Sherbrooke Fat Stock Show and sale is a culminating point in their year's activity. Much interest is attached to this event because of the large entries and the keen competition. In the past record prices have been paid for the prize winning animals and this in no small measure has encouraged and stimulated production over a wide area.

This year a new feature, Shorthorn breeding classes, has been added. In the development of the show home bred animals have become more and more prominent. In fact last year all the prize winning animals were bred and fed on Quebec farms. The breeders realizing the progress achieved asked for breeding classes to display their breeding stock and encourage the production of better beef which is so important at the present time. The Fair board in spite of existing difficulties encouraged the move and have established six classes for calves and yearling cattle. It is expected that there will be good entries in each class and that keen interest will be displayed in this foundation breeding stock.

According to advance information the quality and finish of the cattle will be perhaps better than last year. Mr. N. G. Bennett, President of the Provincial Shorthorn Association has written that he has been looking over the steers in a number of districts and in most places the feeders were doing a real job. "Competition will be very keen", he stated.

Attention to details

The closer the competition the more importance attaches to details. Months have been spent in feeding and preparation; a little extra time toward the end in putting on the finishing touches often brings a big reward.

Feeding: At this time care needs to be exercised to keep the cattle from going off feed and at the same time making the desired gain. Experienced feeders hold the opinion that there is a decided advantage in cooking or boiling the heavier feeds. It improves the potability and makes for greater consumption and at the same time gives a little extra bloom to the skin and hair. Barley, wheat and peas should be boiled until they have swollen and split. This may be fed alone or mixed with such other feeds as oats, bran and linseed oil meal and fed warm. This should be used to take the place of part of the dry meal ration. It should preferably be fed twice a day but once a day is often a big help. Do not overfeed: 1½ lbs. of grain per 100 lbs. live weight is reasonable.

Grooming. The handling qualities of the skin and hair can be improved by washing and grooming. It should be done once or twice at home to remove all the dirt. Use tar or castile soap and rub thoroughly then rinse and remove excess water. The hair should then be brushed down while it is wet and lived. The brush is then used to fluff the hair by brushing upwards. Clean and fluff the switch.

The condition of the skin and hair can be further improved by using equal parts of sweet oil and alcohol as a dressing applied with a woolen cloth.

An animal cannot stand or walk properly unless the feet are kept in proper condition. The soles should be level and the toes kept short. This should be attended to now and the animal taught to lead and stand properly.

Showing and showmanship: A short time before each animal is shown the finishing touches should be put on. The showman himself should be neat and appropriately dressed. He should not lead his animal into the ring before the right time; for animals get tired and show their weaknesses if any. Use an attractive halter, either leather or rope. The showman should have a show stick or cane in one hand and the lead strap or rope carefully coiled in the other. He should walk on the left side of the animal, keep an eye on the judge and watch for his suggestions. He should keep his animal squarely on its feet and hold the head to show the animal to the best advantage. A stylish animal should be lead at every opportunity. Never lean on the animal you are showing. Leave nothing undone to win honestly. Do not argue with the judge. Be a good loser and a modest winner.

L. H. Hamilton.

"YOU SHOULD SEE WHAT NARVO DID FOR MY LIVING ROOM"

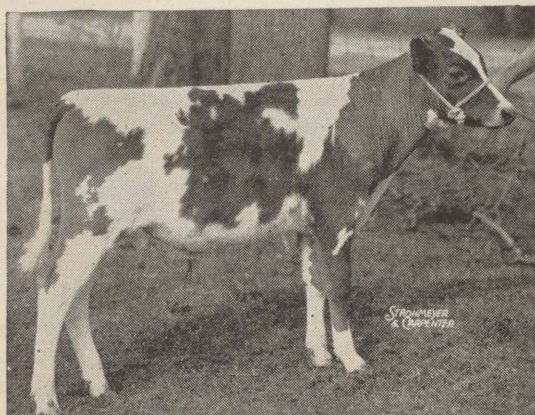


Narvo combines the best features of paint, enamel and varnish. It flows freely, dries quickly, and covers in one coat. Its beautiful range will make your home sparkle too!

MURPHY PAINT COMPANY LTD.

Burnside's Anniversary

The annual Burnside sale took on special significance this year, for it marked the fiftieth anniversary of the founding of the Burnside Ayrshire herd. The Burnside sale date is marked in red on the calendars of all Ayrshire breeders and though the day this year was showery, some 800 people gathered on the grounds of R. R. Ness and Sons' farm at Howick to take part in the bidding on the 47 fine animals offered for sale, or merely to look on and watch the proceedings.



Burnside Marked Copy, a son of Barr Peter Pan born December 23, 1942, whose dam is Burnside Top Grade's Lovely, topped the bidding, being sold for \$1700.00 to R. B. Robie of Whitinsville, Mass. Burnside Flagship, second of the three young bulls offered, sold to the Provincial Dairy School for \$1050.00. The top price for cows, of which 10 were offered for sale, was paid by John Williams of Chatham, N.Y., who bought Burnside Barr Dandy 2nd, an "excellent" seven year old, for \$900.00. He also paid \$650.00 for Burnside Barr Rosalie, the highest-priced bred heifer in a classe of 27.

The 47 head sold for a total of \$19,680.00, an average of \$418.73 per head. L. E. Franklin conducted the sale in his usual efficient manner, assisted by auctioneer Robert Seitz of Wisconsin. About half the animals sold went to the United States.

Before the sale got under way a presentation of a silver tea service was made to Mr. and Mrs. Ness by their nephew Brodie Ness, on behalf of the Canadian Ayrshire Breeders' Association. The presentation marked the completion of 50 years of service to Ayrshire development by Mr. Ness who, with the able assistance of his four sons, has really done something great for the Ayrshire breed in Canada.

Buy War Savings Stamps

Honey Producers Protest

Beekeepers of the Montreal district are by no means satisfied with the price ceilings set under a recent order of the Wartime Prices and Trade Board and have made an organized protest to Ottawa.

It is not so much the actual prices that have been established that are causing dissatisfaction. The ceiling price set is 72 cents for a 4 pound pail of No. 1 White and 78 cents for pasteurized granulated honey, and what the beekeepers are taking exception to is the premium of 1½ cents per pound accorded to the "pasteurized" or processed product.

Pasteurization, when applied to honey, is a process which kills yeast cells and therefore prevents spoiling of the honey. The honey is heated to 150° and then cooled rapidly to 50°. During the processing a small quantity of fine-grained granulated honey is added to the liquid and acts as a "starter" to hasten crystallization to a fine-grained solid honey. A great advantage of the process is that honey of widely different types and qualities may be blended into a final product of uniform flavour and quality.

No. 1 White honey is extracted and packed directly and requires no processing to make it keep. Therefore, the beekeepers of Quebec who, by careful management, are able to produce this high quality honey feel that they should be able to command the same price as that accorded to the pasteurized product.

At a meeting held at the apiary of J. R. Younie of Howick last month which was attended by a number of prominent beekeepers of the district, it was agreed to make a formal protest to the W.P.T.B. and the following resolution was adopted and forwarded to Ottawa.

"Resolved that we, the English-speaking beekeepers of the counties of Beauharnois, Chateauguy, Huntingdon, Napierville, and the Island of Montreal, in meeting assembled, protest most emphatically against the unfair advantage being accorded to pasteurized granulated honey over No. 1 White:

That said advantage is discriminatory,

That the said differential in price creates a hardship against the producers of No. 1 White honey by withholding from them an equal return for their labour.

We therefore request an immediate change in the price of No. 1 White honey to not less than that accorded the pasteurized granulated honey under Order 286."

A delegation visited Ottawa on August 14 to lay the case before the proper officials, but were told that no change in the price ceilings was contemplated. Two weeks later came word of rationing which will call for changes in the usual methods of packing and selling. As one man puts it "Right now the honey business has gone sour."

UNDERDRAINAGE . . . (Continued from page 5)

with surface drainage alone. We refer here to the valleys of the Richelieu, Yamaska, Chateauguay and St. Lawrence Rivers. Men who have been studying sugar beet growing in this Province and who have had experience in the Ontario sugar beet areas are already coming to the conclusion that, without underdrainage, it is doubtful whether our high quality river valley lands will be suitable for beets.

The Quebec Department of Agriculture has for many years followed a highly beneficial policy of outlet ditch construction throughout many agricultural areas of Quebec where such outlets were badly needed. Good outlets are absolutely necessary to successful underdrainage. However, if farmers located near such outlet ditches wish to "cash in" on the full benefits of these structures, it is necessary to resort to underdrainage.

Financial Assistance Necessary

As long ago as 1920 there was passed in Quebec an Act making it possible for municipalities to make loans to farmers for the purpose of installing underdrainage systems on their farms. This Act is largely a copy of a similar Act which has been very beneficial to farmers in Ontario for many years. So far, however, this has been a dead letter on the books and it is doubtful whether any municipality has ever made use of it, largely because the Province does not undertake to advance the necessary funds to the municipalities as is done under the Ontario Act. In Pontiac county, for instance, there is needed probably twice as much underdrainage as has now been installed, but because the operators of these farms do not have the funds, it is doubtful whether the work will be done for many years. Probably the reason for the lack of funds is the fact that poorly drained land on these farms prevents the operators from accumulating sufficient money to install the necessary drainage. Under reasonably good farming methods experience has shown that underdrainage loans are sound

investments either for a municipality or a province. It is to be hoped that before long the "Quebec Drainage Act" will be amended so that its effectiveness can be realized.

The experience of the Province of Ontario with a similar Act has been nothing short of phenomenal. The Drainage Aid Act of that Province was passed as long ago as 1878, and at that time a sum of \$2,000,000.00 of the Consolidated Revenue Fund of the Province was set aside for this purpose. So valuable was this assistance that in the year 1927 a third million was added to the fund. Today practically all of this money is invested in underdrains on Ontario farms. It is safe to say that the returns to farmers holding these loans are equal to from 15 to 20 percent of \$3,000,000.00 annually. When we compare the farms of the two Provinces of Ontario and Quebec, it becomes evident that a larger proportion of the good agricultural lands of Quebec lie in our river valleys, therefore are in greater need of underdrainage than is the majority of land in Ontario. It is to be hoped that the experience of such a year as 1943 will hasten the day when more importance will be placed on this form of land improvement.

Rhubarb for the Winter

Fresh vegetables are at a premium during the winter months and especially this year imported vegetables are likely to be scarce. For a long period the only vegetables we are likely to have will be stored or canned products.

But rhubarb is an exception. This healthful and appetizing vegetable can be forced in many homes during the winter and provide a continuous supply of edible stalks from December to March. All that is needed is a cellar where the temperature can be kept between 58 and 60 degrees Fahrenheit and a supply of roots.

Crowns that are two years old or more are best for forcing. They should be dug before the ground freezes solidly in the fall and left outside until thoroughly frozen. For this purpose they may be stored in an open shed and given a light covering of soil or straw to prevent too much drying-out. They should be frozen for five or six weeks before being forced.

For forcing the roots should be planted in boxes, or placed fairly closely together on the cellar floor, packed in light soil or sand. They should be thoroughly watered at the time of planting but after that the soil or sand should be kept only moderately moist.

The roots must be kept in the dark and the temperature kept as near 58° as possible. Under these conditions the first picking will be ready about a month after planting and the harvesting period should last four or five weeks. Four or five large roots will supply the average family and if these roots are brought in at intervals of three weeks a constant supply of rhubarb may be had all winter.



A fine oat crop on newly drained flat land on the farm of Mr. Harold Cuthbertson



DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Flax Co-ops Make Great Progress

Officials of the Department of Agriculture are justly proud of the progress that has been made in the flax industry of this province.

Before the war started in 1939 there was only one area in Quebec where flax was grown to any extent. This was around de Beaujeu in Soulanges County, a few miles south-west of the Island of Montreal, where the Vaudreuil-Soulanges Flax Co-operative processed the crop from about 2500 acres. At that time we imported linen and other flax products from Europe — Poland, Holland, Ireland, Belgium — where long practice had enabled farmers to produce a high quality product. But these supplies were cut off in the early war years, which meant we had to look closer to home for our supplies.

The Provincial Government was not slow in realizing the need for establishing a flax industry here at home, for flax products are needed in all sorts of war industry, to say nothing of civilian requirements. Accordingly, flax-growing was encouraged and co-operatives were helped to organize in many parts of the province.

Today there are 14 flax co-operatives scattered all over Quebec; three of them, at St. Louis de Gonzague, Notre Dame du Lac and St. Charles de Caplan, organized this year. One factor which has been important in this increase is the improved methods of fireproofing employed in building, which has reduced the danger of fire, always a major hazard in processing flax, to a minimum.

From the 2460 acres in flax in 1939 the area devoted to this crop in Quebec has increased to between 28,000 and 30,000 acres, and sale is assured for all the production at

reasonably good prices. It is all sold as line fibre and tow. There is only one plant in Quebec where it is made into a finished product — the Dominion Textiles plant at Drummondville which makes a special linen thread which is used in the making of army boots.

With the exception of the Soulanges-Vaudreuil plant the new co-operative factories are all equipped with machinery made in Quebec Province at Plessisville by the Plessisville Foundry.

It seems unlikely that there will be any great increase in flax-growing at present, but should unforeseen demands for flax and its products materialize, it will not be a difficult matter to expand this young but vigorous industry which is making a great contribution to the rural economy of our province.



Flax arriving at the Vaudreuil-Soulanges mill.

Successful Hog Sale at St. Hyacinthe

The annual hog sale of the Quebec Hog Raisers' Society is an opportunity for progressive breeders to replenish their breeding stock of pure bred, and this year's sale, held at St. Hyacinthe last month, was highly successful. One hundred and eighty-five pure bred hogs, both male and female, were offered for sale and all found ready buyers. Boars, of which there were 122, sold for an average price of \$46.25. The highest price paid was \$113.00 for a young XXX boar bred at the Provincial Dairy School. Two other boars brought \$83.00 and \$82.00 respectively. Ninety dollars was the highest price paid for a sow, of which 63 were sold for an average price of \$40.80.

This sale is encouraged by the Department of Agriculture which sees in it a splendid opportunity for hog raisers of the province to improve quality by obtaining pure-bred breeding stock. The Department is also a buyer at this sale, sending the animals bought there up to the colonization districts.

In addition to the Provincial premiums offered to purchasers of pure bred stock, the Quebec Hog Raisers' Society also offers to buyers who live more than 25 miles from St. Hyacinthe a bonus of \$1.00 per head bought at the sale, to help pay transportation costs back to the home farm.

Fertilizers for 1943-44

by L. C. Raymond

Active consideration of the fertilizer supply for fall application in 1943 and the spring demand of 1944 has been under way for some time. From the raw materials in the mine to the refined product ready for distribution, a vast deal of labour and processing is required and consequently much time must elapse, hence the necessity for forward planning. Under stable conditions, long experience has made it possible to estimate requirements to a nicety, but during wartime with labour scarce and the supply situation fluctuating, no simple rules can apply.

For some time now fertilizer supplies have come under the direction of the Combined Food Board, the stocks being apportioned in the most impartial manner to all of the countries supporting the United Nations war effort. Regardless of the requests of any one country, fertilizers are placed where they will make their greatest contribution toward winning the war.

When the fertilizers administration, the trade and the agronomic committee sat down to look the 1943-44 situation over, they were faced with some difficult problems. The three chief components of farm fertilizers did not balance. Nitrogen was available in large quantities due to surplus supplies from munition plants. No shortage of phosphorus existed, save in the labour required to process it. Potash stocks available to Canada or the whole of this continent were down twenty per cent, in spite of larger amounts being processed than ever before. Coupled with this basic supply picture was increased usage in 1942-43 of approximately twenty per cent and an anticipated further advance.

All sorts of schemes were explored in an attempt to distribute available stocks where they would do most good, but the administration came reluctantly to the conclusion that in the end the most feasible plan would be to reduce, in practically all cases, the amount of potash in the standard mixed fertilizers supplied in previous years. Two serious objections to this procedure are at once apparent. First, the concentration of the formulae are thereby reduced. This is a backward step, since it usually implies more filler and more haulage. Second, it does not place the short potash supply where it is most urgently needed. In spite of these objections, practical considerations forced the decision taken.

Accordingly, during the period under review the fertilizers for general usage will have the following formulae:—

0-14-7	2-12-4	4-8-8
3-18-0	4-12-6	9-5-5

Space will only permit a brief comment on each of these different combinations. A much fuller statement showing their recommended use will be available in the regular

sheet published by the Department of Agriculture and obtainable from all the agricultural offices through the province.

0-14-7.

This combination was established last year replacing the 0-16-6 in this province. There is no change for this year. Increasing amounts are being used chiefly for pastures as a fall application and also as a supplement to manure for grain crops or soil that is medium to light in character.

3-18-0.

This fertilizer, with an entire absence of potash, is new, or virtually so, to Quebec. It is adapted naturally to soils which have a good native supply of potash, i.e. the heavier soils generally. Where such soils are not naturally too fertile, it will find a place with grain crops. Owing to its three per cent of nitrogen, it must be used for grain with caution since lodging may result. Application in smaller amounts is suggested. It will seldom be possible to utilize it as a supplement for manure due again to the above reason. For hay meadows, as a top dressing on heavy soils, it should also be quite suitable. It is strongly suggested that wherever possible this combination should be made use of to replace the potash carrying formulae reserving the latter for the soils where they will do most good.

2-12-4.

The 2-12-4 is the old familiar 2-12-6 in new clothes, the latter being the most extensively used combination in Quebec. In its new form it will simply have to try and fill the gap till potash supplies are again adequate. On medium or loam soils it has been recommended for a wide variety of crops such as pastures, cereals, hay meadows and a host of lesser crops.

4-12-6.

No change has been made in this mixture which carries the same phosphorus and potash as the old 2-12-6, but with two per cent more nitrogen. Chief uses for this combination were cereals on poor ground without manure, permanent meadows, pastures and truck crops.

4-8-8.

Another very popular and much-used fertilizer, the 4-8-10, has had to be revised to meet the present shortage. The 4-8-10 was extensively used for potatoes and having their potash needs in mind it was a serious matter to make such a reduction. Stark necessity determined the step taken. In addition to potatoes, this formula is used extensively for truck crops generally and even for cereals under extremely poor conditions.

9-5-5.

The 9-5-5 is a revision of the 9-5-7 formerly recommended for apples. No serious trouble is anticipated for this crop with the change made.

In addition to these general purpose fertilizers, provision has been made to supply a limited amount of three special brands for tobacco. Other crops having particular needs will be taken care of by license where the necessity can be clearly established. The standard forms carrying the separate ingredients will still be available — nitrogen and phosphorus carriers in unlimited amounts, but potash in strictly controlled supply. Superphosphate alone for grain crops on our heavier soils or with manure on lighter soils will suffice in many cases.

With some slight clarification prices are to follow the same general scale of those for last year. Lower ton costs will obtain where the concentration of the formula has been reduced, but unit costs will remain substantially the same. For the balance of 1943 the same regulations for bonusing fertilizers will obtain, but some revision is anticipated in 1944.

The cooperation of all is urgently required to meet the existing situation. Potash conservation should become the watchword. If it is possible to use a formula without potash, so much the better, otherwise use the one that will do the job with the greatest saving of that very scarce commodity.

Bonuses for Fertilizer Purchasers

Mr. R. l'Esperance, Secretary of the Provincial Fertilizer Board, has made a summary of the premiums which are offered for the purchase of chemical fertilizers for the coming season. The Federal Government grants premiums to farmers purchasing fertilizer for use on the following crops: fall wheat and rye; hay (alfalfa, clover, timothy, etc.); pasture lands. Premiums will be paid up to November 10th, to a maximum of \$25.00 per farmer on the following mixtures and the following rates:

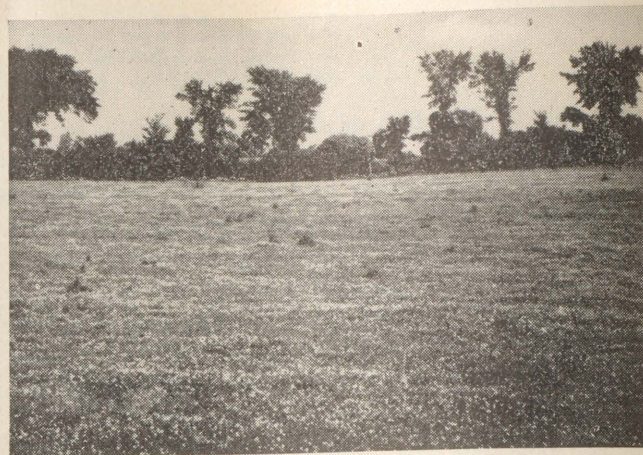
0-14-7	\$3.15 per ton
3-18-0	3.60 per ton
2-12-4	3.00 per ton
4-12-6	3.90 per ton
2-12-6	3.30 per ton

The amount of the last which will be available is that which had already been manufactured up to July.

Premiums will also be paid for the purchase of separate ingredients at the following rates, which are the same as were in effect last spring: 30 cents per unit of nitrogen, 15 cents per unit of phosphate and 15 cents per unit of potash.

Order now

Fertilizers for use this fall should be ordered at once. If it is possible to order and take delivery now of fertilizer to be used next spring, do so by all means. If delivery cannot be taken this fall, at least put your order in now, specifying spring delivery. This will give the manufacturers a better picture of what will be needed for next season and give them a chance to make up their supplies during the winter, so that there will be no delay in filling orders when the spring rush starts.



An excellent pasture showing a wealth of wild white clover in bloom. Fertilizers plus the plentiful moisture have provided ideal conditions for growth.

Ceiling prices which will be in effect this fall are as follows. These are retail prices per ton, F.O.B. shipping point for rail delivery from Montreal, Chambly, Beloeil and Quebec.

0-14-7	\$27.25
2-12-4	26.50
3-18-0	29.00
4- 8-8	29.75
4-12-6	31.50
2-10-8	31.75
3-10-8	34.25
5- 8-7	36.50
9- 5-5	32.50
Superphosphate 20%	23.25
Ammonium sulphate	44.00
Nitrate of Soda	52.50
Nitrate of Ammonia	61.00

Wartime Supplement to the Feeder's Guide

At the beginning of the year the Provincial Feed Board published the 15th edition of the "Feeder's Guide and Formulae for Meal Mixtures." Since this appeared in print a scarcity of some feeds, particularly proteins, has developed, as all our readers know, and some revision has had to be made in the mixtures recommended, since some of the ingredients called for in the formulae are difficult or impossible to obtain.

The Feed Board has therefore issued a "Wartime Supplement to the 15th Edition" which was prepared "to give guidance to feeders who because of present scarcity of certain feedingstuffs, find it impossible to follow the recommendations given in the 15th edition of the Feeder's Guide." In this supplement are given feeding mixtures which will maintain efficient production while using the feeds that are available and a copy should be in the hands of every feeder. They are available from the Department at Quebec, or from your agronomist.

Farmers who need new spraying machines should report their need to their machinery agent at once, so that the total number of new machines required will be known before the quota is set for 1944.

Quebec Expects a Good Canning Season

With jams and jellies the latest foods to be put on the ration lists, it is comforting to know that here in Quebec our canning industry is in good shape, and there should be ample supplies of local products available for fair distribution during the winter.

There are 81 canning factories in this province representing a capital investment of around seven million dollars. According to the Chief of the Horticulture Service, Mr. J. H. Lavoie, we have made amazing progress in this line in the last twenty years. There were practically no canneries in Quebec in 1920: now only Ontario is ahead of us. In 1941, Quebec canneries processed an imposing quantity of fresh farm produce — 5,200,000 pounds of fruit of various kinds and 153,389,000 pounds of vegetables. The market value of the finished products was \$10,565,000.00.

In addition, 2,350 farmers canned fruits and vegetables at home, using 12,583,000 pounds of produce to record an increase of 48% over the previous year. If the same progress is maintained, as seems likely, Quebec canneries will establish a record in 1943, provided only that sufficient supplies of produce will be available and that labour can be found to operate the factories.

Labour Offices Still Open

During the months of June and July the Quebec Farm Labour Bureau placed 1019 men on farms, and more might have been placed had all farmers who needed help appealed to the Bureau for men. The two offices, one at 90 St. Joseph St., Quebec and the other at 31 St. James St. W., Montreal, are still open and can place any experienced farm worker who is looking for a position.

In particular, the Bureau has a number of young men on its lists, who are available to help market gardeners with the fall harvest. These young men are between 16 and 19 years of age and have all had some experience. Highly experienced farm workers are difficult to find, and growers who will be needing extra help to harvest their vegetable crops are urged to get in touch with one of the offices of the Quebec Farm Labour Bureau at once.

With regard to soldier labour, the conditions have already been published fairly extensively in the daily newspapers. However, we will give a few facts for the benefit of those who may want to take advantage of this source of farm help. In order to employ a soldier, the farmer must make application on a form which can be obtained from either of the labour offices at the addresses given above or from the nearest Selective Service office. The soldier must be guaranteed at least 12 days of employment, rain or shine, and is to be paid at the rate of \$3.00 per day plus board and lodging. The farmer will not pay any money direct to the soldier, but will make out a time sheet at the end of his period of work and send it, along with a money order for the amount he has earned, to the Receiver Gen-

eral. The soldier will receive his wages from the Army — not from the farmer.

Do not confuse "compassionate farm leave" with "farm duty." The former is leave granted to the soldier at his own request: when placed on farm duty the soldier is, in effect, conscripted for farm work.

LATE BLIGHT . . . (Continued from page 8)

safely done. Mowing and removal of the vines a few days before digging has been recommended but this does not seem to be as effective as scorching the tops with a copper sulphate spray.

Freshly wounded tubers are very susceptible to rot, and all mechanical injury should be avoided. This requires extreme care at all times in all handling operations. Allow the tubers to lie on the ground after digging for an hour or two so that they will become dry. This increases the toughness of the skin of the tubers and helps to reduce bruising and peeling. Gather the tubers in padded baskets and pour them carefully from one container into another.

Potato tubers should never be covered, even temporarily, with the tops.

Storage

The storage room should have good ventilation, and the bins should be made of slatted walls and floors to allow satisfactory aeration of the tubers.

The storage and its equipment should be thoroughly cleaned, taking care to remove all old rotted potatoes and culls. In order to free it of various tuber rotting organisms, it is well to disinfect it by spraying ceiling, walls, floor and bins with one of the following solutions:

Formaldehyde — 1 pint, Water—10 gallons
OR

Copper sulphate — 1 pound, Water—10 gallons
A thorough aeration of the room should follow the disinfection before potatoes are stored in it.

Tubers should not be placed in storage while they are wet and ventilation should be controlled so as to prevent condensation of moisture on them while in storage.

The potatoes should be carefully sorted and only those which appear to be entirely free of rot should be put in permanent storage. It is often an advantage to hold the tubers from a blight infested field at a moderately warm temperature for a week or two so that any rot in the tubers can develop and become more evident before this sorting is undertaken.

The optimum storage temperature is from 38° to 40°F.

RESEARCH IS THE KEY TO KNOWLEDGE



→ CEROGRAS ←

Natural Green Feed

GREENMELK COMPANY LIMITED, WALLACEBURG, ONT.



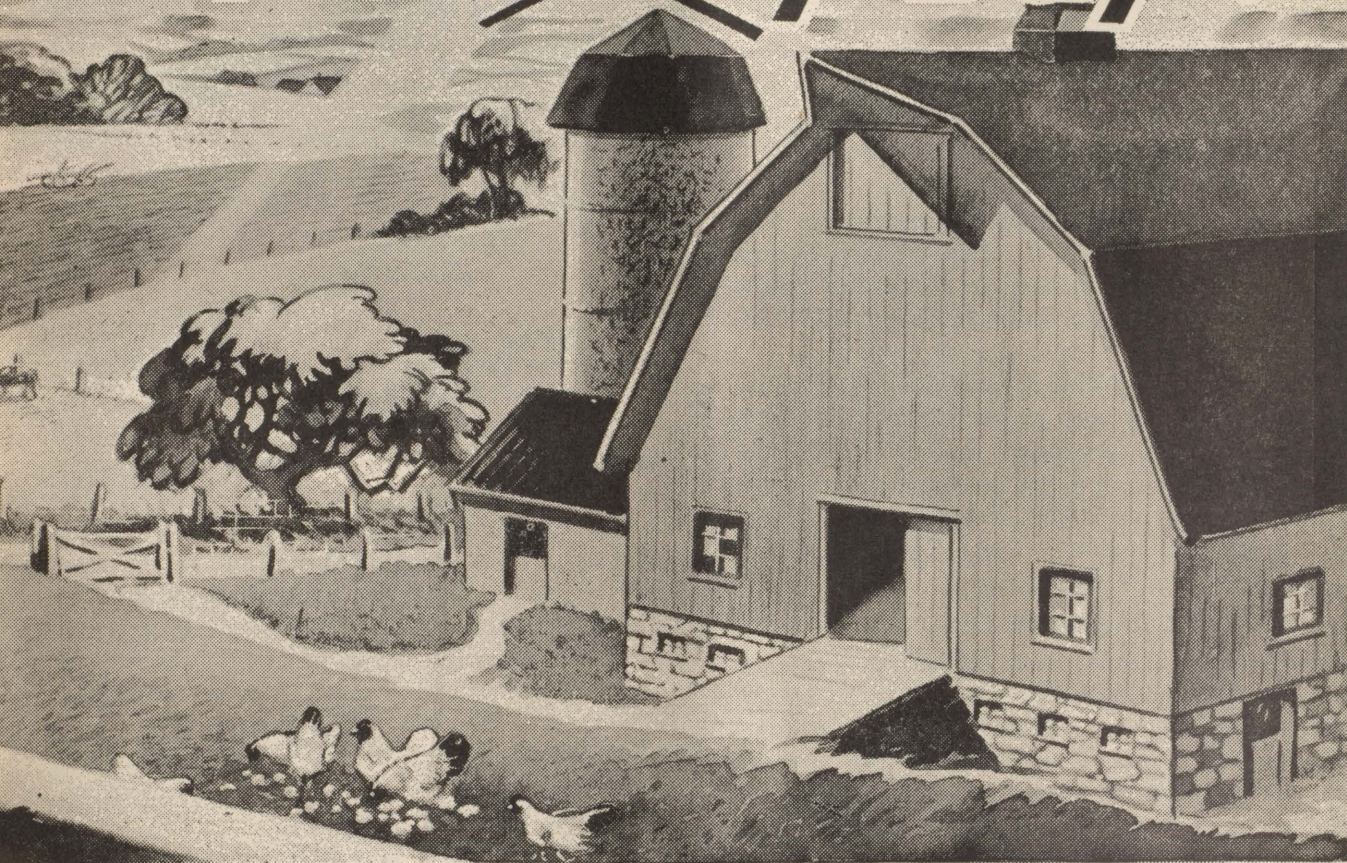
WHAT an inspiration... a bright day... a day of joy! Save to bring happiness and save to provide the means to enjoy happiness to the full. Saving will hasten the day... if you put your savings into Victory Bonds. So, save all you can... and lend to your country. It's one thing you can do to help to shorten the war.

In homes from which boys and girls have gone into the fighting forces there is anxiety for their safety. Some homes have borne the grief of casualties, but none of us have had our home bombed; none has suffered wounds at home; none has had our home wrecked. No farm crops have been confiscated; no stock driven off to feed enemy invaders. In a world at war most

GET READY TO BUY

VICTORY

Bright for a ~~Rainy~~ Day!



Canadians pursue their daily lives much the same as in times of peace. We are so far removed from actual conflict that many still fail to realize fully that this is our war. We hope and pray for peace . . . the end of hostilities . . . but peace cannot come before Victory. The war is definitely in our favour. We are the invaders . . . taking the initiative . . . but much fighting remains to be done . . . *we could still lose the war if we relax our efforts.* We accept, without question, our heritage as free men, and the privileges which that freedom gives us. We must maintain the right to protect those privileges. We must keep on buying Victory Bonds. The Fifth Victory Loan opens October 18th. Save to buy Victory Bonds to end war and bring peace. Hasten that bright day!

MORE

National War Finance Committee

BONDS

Fifty Years of Progress

In choosing Thursday, August 19th, for the fiftieth anniversary meeting of the Pomological Society the directors hit on one day that was fine until almost dark. Brilliant sunshine poured down on Abbotsford as the members and visitors met in outdoor discussions and toured many of the fine orchards of the district. The size of the crowd can be judged by the fact that 115 automobiles were counted parked around the meeting place.

The delegates were welcomed at the door of the Parish Hall on the Abbotsford North Road by Mayor Menard and by President Edgar Standish, then left for a motor trip through the beautiful orchard of Albert Whitney. During this trip many comments were heard on the excellent condition of the orchard and particularly the clean condition of the fruit on the trees.

A box lunch was provided at the Hall, and with it the guests were served a mixture of black currant juice and apple juice, blended in proportions that made a delicious drink. Apart from adding a tang to the apple juice and giving it a deep purple colour, the black currant juice supplies an adequate amount of vitamin C which is lacking from the natural apple juice.

A Lesson in History

After lunch an interesting talk on the history of fruit growing in the Abbotsford district was given by Morley Honey. Apple growing is no new thing in this part of the country; the first trees began to bear as far back as 1812. These were seedlings, but grafted trees had already been planted two years earlier. In 1823 the first grafting was done in Abbotsford orchards and in 1846 budding was introduced. In 1857 N. C. Fisk established a commercial nursery and his example was soon followed by others. The first spraying was done in 1890, using a mixture of Bordeaux mixture and Paris Green, put on with hand pumps.

In 1874 a type of organization new to the province was established — the Fruit Growers' Association of Abbotsford. This society published a suggested fruit list

the year after its organization, and held its first show in the following year, 1876, with 179 samples of apples exhibited.

In 1894 the organization was expanded to cover the whole province, and this was the birth of the present Quebec Pomological Society. The three surviving charter members of the Pomological Society were present at this fiftieth anniversary, and their photographs, along with that of Mr. J. R. Marshall, who has been a member for some 40 years, are published with this article. Mr. Whitney and Mr. Gibb still live in Abbotsford; Mr. Newman, whose name is familiar to those who are acquainted with raspberry varieties, is living in Ville La Salle.

Orchards Visited

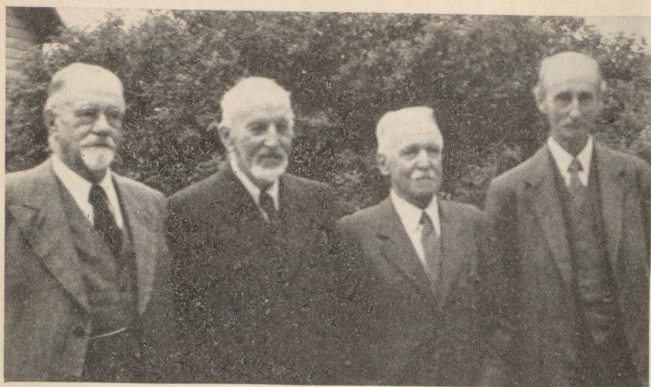
The meeting then visited some nearby orchards, those of Messrs. Morley Honey, Roswell Thomson and A. W. Buzzell. Here Dr. H. B. Tukey of the Geneva Experiment Station, discussed experiments with Malling root stocks and explained the possibilities of developing small trees which can be more closely planted and which will make an orchard cheaper to operate. Racicot of Ottawa congratulated the Abbotsford growers on the generally clean conditions in their orchards, which he said was the chief reason why fireblight, which is a serious menace in many parts of the province, was practically non-existent in Abbotsford. H. Hill of the C.E.F. said that magnesium deficiency is spreading in this province, and that he had noticed some signs of it in this district. D. S. Blair gave a demonstration of top-working Hibernals by budding and F. S. Browne recalled early experiments with orchard fertilizing which had been carried out in Abbotsford, and from which have grown the present fertilizer recommendations.

A visit to the orchard of Arthur Rowell was the next item on the programme. This orchard is set on a hillside which twenty years ago was considered nothing better than waste land. The land is too steep and rocky for spraying to be done by conventional methods, but Mr. Rowell has overcome this by putting his mixing tank at the top of the hill and pumping the spray solution to all parts of the orchard through a system of 1½ inch pipes. The pump, aided by the slope of the pipes, can maintain plenty of pressure all through the system. The spray hoses can be quickly connected to nozzels set in the pipes at regular intervals and the whole orchard can be sprayed in record time, since there is no loss of time taking an empty spray tank back to a filling station and returning with a full tank to the scene of operations.

Dinner at the Windsor Hotel at Granby, followed by an interesting travel-talk by Dr. Tukdy, who took his listeners on a 25,000 mile trip across the continent and back, completed a most successful outing.



The meeting got under way in good time.



On the left is Mr. J. R. Marshall, a member of the Society for 40 years. Beside him are the three surviving charter members: Wm. J. Gibb, Robert Whitney, and Cecil P. Newman. The combined ages of these four gentlemen is 332 years.

This Year's Apple Crop

The latest estimate we have of the Canadian apple crop by provinces is as follows. Figures are given in bushels.

	1943	1942
Nova Scotia	4,819,000	3,918,000
New Brunswick	240,000	246,000
Quebec	900,000	1,170,000
Ontario	1,754,000	1,851,000
British Columbia	4,139,000	5,808,000
	11,852,000	12,993,000

Scab is reported widespread and fire blight is bad in certain areas especially in Huntingdon, Napierville and Brome counties. Sales of Yellow Transparent and Duchess opened at higher prices this year due to the shortage of all other fruits. The Quebec crop of early apples including up to and Wealthy is estimated at 275,000 bushels. McIntosh may run up to 500,000 bushels, Fameuse 85,000 and other varieties 40,000 bushels.

New Advisor to Mobilization Board

Mr. S. J. Chagnon, Director of the Dairy School at Ste. Hyacinthe, has been appointed to represent the interests of the agricultural profession on the Mobilization Board of Military District 4. Mr. Chagnon's wide experience of farming and farming conditions will be a valued asset to the board when requests for exemption from military training are received from farm workers. His duties on the Board will be to act as an advisor in any doubtful cases; to help determine whether the worker claiming exemption is acting in good faith; to decide, sometimes after a visit to the farm in question, if the services of the man called up are essential to the successful operation of the farm.

We feel that the Board has made a wise choice in appointing Mr. Chagnon and we are sure that the interests of the farming community will be safe in his hands.

Victoriaville's "Black and White" Day

For the second consecutive year Victoriaville had the honour of being host to the most important "Black and White" day in all Canada. The breeders of the St. Francis district brought out 226 head of first grade cattle and Clarence Goodhue who was acting as judge was astonished at the quality of the animals that he found waiting for him. Many distinguished guests were present to congratulate the breeders for their amazing success during the last 10 years.

Of the total of 226 head, juniors numbered 109, and seniors 117. There were also 74 groups. Prices paid were \$2.00 for juniors, \$3.00 for seniors and \$2.00 per group.

The section of yearling heifers was the largest, with 38 entries. Aged cows in milk came next with 30 head and there were 27 two-year old bred heifers. In the groups division, progeny of dam featured 22 entries.

The Junior Championship went to Julien Clyde Rag Apple owned by J. H. Rondeau, St. Elizabeth de Warwick. The Senior and Grand Championship went to Repentigny Hartog Posch owned by Armand Ducharme. The Junior Female championship was awarded to Des Rives Ollie Rag Apple Manon owned by Wilfrid Verville, Arthabaska and the Senior and Grand championship was given to DeKol Baroness Louise owned by Alfred Pepin, Warwick.

The success of this Black and White show is due to the good work of Hector Beliveau, a very good friend who has earned the recognition and thanks of all the breeders. To W. Timmermans, who is always ready to help, and to the club secretary, Mr. Granger, the organizers say "many thanks."

Our Pork Objective is in Danger

Last spring Quebec farmers were asked to ship at least 25% more hogs to the export market, but this increase is not being obtained. There has been a certain increase in hog raising in this province, but there has also been a greater local consumption of pork with the result that many animals that could have been shipped overseas are being sold for home consumption locally.

But another and probably greater reason is the high rate of mortality in young pigs. Thousands of piglets died last spring that could have been saved by proper care of the sow before the pigs were born. The average of loss for all Canada, in advanced registry litters only, which means on farms where good practices are followed as a matter of course, was 25½% last year. By provinces, the figures were Quebec, 29%; Ontario, 25%; Manitoba, 25%; Alberta, 29%; Saskatchewan, 19%. These figures are calculated on the basis of piglets weaned compared with total births. In Quebec, on all farms including the poorest as well as the best, only about 60% of pigs born are raised to weaning age.



CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

The Essence of Co-Operation

Here is the original wording of the appeal by George W. Holyoake, of Manchester, England, when the Rochdale Pioneers applied in the year 1844 to the British House of Commons for their charter.

Co-operation supplements political economy by organizing the distribution of Wealth,

It touches no man's fortune.

It causes no disturbance in society.

It gives no trouble to statesmen.

It enters into no secret association.

It contemplates no violence.

It subverts no order.

It envies no dignity.

It asks no favors.

It keeps no terms with the idle.

It will break no faith with the industrious.

It asks no special privilege.

It seeks no government aid.

It fears no competition in trade in any branch of production.

It abhors monopoly and will fight them to the bitter end.

It seeks healthy competition knowing this is the soul of all true progress.

It means self help, self dependence and such share of the common competence as labor shall earn or thought can win and this it intends to have.

Canadian Credit Unions Meet

The first All-Canadian Conference of Credit Union leaders was held September 11 and 12th. Levis, Que., where the first Credit Union in America was formed and home of Alphonse Desjardins, the founder, is the appropriate site for this first Canadian convention.

The committee on arrangements is made up of Hon. Cyrille Vaillancourt of Quebec, Gordon Smith of Hamilton, B. N. Arnason of Regina and Dr. A. B. Macdonald of Antigonish.

Among questions discussed are:—

- 1.—Taxation and Legislation affecting Credit Unions.
- 2.—The place of Credit Unions in the Post-War Reconstruction Period.
- 3.—Bank Act Revision.
- 4.—A National Bi-lingual Credit Union Publication.
- 5.—The Quebec Credit Union Development.
- 6.—The Need of a Canadian Credit Union Federation.

The Journal will carry an account of this meeting in its next issue.

Federée Business Up

Directors of the Co-operative Federee met on August 5th to review the operations of the first six months of 1943, and found the organization in a very healthy position. Gross business from January 1st to June 30th amounted to \$11,627,785.96, an increase of over \$1,800,000.00 over the corresponding period in 1942. Most of the increase can be traced to larger consignment of agricultural produce handled by the Co-operative, sent

by member organizations and by individuals. Since the first of the year seventeen new societies have been affiliated, bringing the total to 301.

During 1942 the Co-operative Federee paid out \$95,749.25 in patronage dividends to its members, and during the past 10 years the total patronage dividends have amounted to \$367,240.28, which is about 7% of the total assets of the Co-operative Federee as at June 30th, 1943.

No Co-operation without Education

"Education in co-operation is the cement or mortar needed to bind together solidly the whole structure of the temple of co-operation. . . . In the last analysis the success, the growth, the strength and the permanency of the co-operative movement depends on the amount of co-operative education that has penetrated the masses of people and remoulded their economic and social thinking."

The Rochdale Pioneers early recognized the necessity of educating their members and began by setting aside two and a half per cent of their surplus for educational purposes. Co-operatives since have followed their example with varying thoroughness. Farm co-operative movements have always placed strong emphasis on the educational end, and have been careful to set aside funds to provide for it. They have not always been as careful about their methods of education, and some have failed because they relied on general appeals, high pressure campaigns and short-range propaganda to develop their constituency. Widespread publicity is necessary, but along with it there must be education of a type that will develop the under-

standing and capacity of the individual member. The co-operative must train its own leaders. Through group study the members learn the principles on which the movement is based. Continuous education and publicity ensures democratic control of the organization, breeds loyalty to the aims and objectives of the co-operative and inspires confidence in the management. Without education and research there is small chance for the expansion which is essential to permanent success.

Why Co-ops Fail to Function

In one of the most valuable co-operative studies of recent years, "Farmers Co-operative Discontinuances, 1875-1939" by Cochrane and Elsworth of the Co-operative Research and Service Division of FCA, the authors describe the two most frequent causes for co-operative failure—poor leadership and lack of co-operative understanding.

After explaining that "leadership may rest in the president, some member of the board of directors, the board as a whole, a hired manager, or all of those functioning as a unit," the authors say:

"Many co-operative discontinuances have been caused by mediocre, unimaginative, and visionless leadership. As here used, leadership is much more than management. It is on a higher level, thinks in larger terms, peers farther into the future, and plans for an ever-widening field of activity with more diversified benefits for an increasing membership.

"The disappearance of many a co-operative has been accounted for in such terms as "insufficient business" and "too strenuous competition", when the real cause was the lack of resourceful leadership. Leadership is directly responsible for efficient management, for education of the members as to the principles and practices of co-operation, and for instilling in the membership a desire to translate co-operative principles into action.

"In the case of a large number of discontinuances the members failed to give full support to their co-operatives. They may have been uninformed as to their parts in the joint undertakings or perhaps they did not take seriously the responsibilities that were justly theirs. Possibly the leadership and the management both failed in the full performance of their duties. The remedy for the shortcomings of membership would seem to be more education, and then more.

"Co-operation as an economic technique does not fail as frequently as do the men and women who attempt to use this technique without knowledge of its limitations as well as its many possibilities. Their sins of commission and omission are many. *The greatest of these is that they have not mastered the fundamental principles of co-operation nor schooled themselves sufficiently in the application of those principles*".

MARKET COMMENTS

The wheat crop is now estimated at around 285 million bushels. This is about an average yield per acre on the smaller area sown this year. The estimate is now for a yield around 18 bushels per acre, which is a pleasing contrast to the yield of 11 bushels per acre in 1918. Canada is still running in fair luck in regard to grain crops, as compared with the 1914 to 1920 period.

This good luck does not apply to Eastern Canada, as far as grain crops are concerned. The East will require increased amounts of Western grain this season, and it is good news that the Western areas have plenty available. The hay crop of the Eastern Provinces was surprisingly good; but the weather was bad for haying generally, and the quality is not up to the average.

The bad haying weather was good for grass. Pasture has been extra good for the time of year; the milk flow has kept up well; and the butter in storage is far ahead of last year.

Live stock prices showed small variation during the month. Cattle prices eased, in accordance with price regulations.

The feature of the season has been the high prices ruling for fresh fruits and vegetables. Duchess apples made the pages of the Financial Post of Toronto, where they were quoted one week at \$7.50 per bushel. The Montreal price for the week of August 19th was up to \$5.00 per box for Ontario Duchess.

Most small fruits have been in light supply, the demand brisk, and prices corresponding high. The month saw ceiling prices extended to peaches, pears and plums, and rationing extended to honey, jams and marmalade.

Trend of Prices

	August 1942 \$	July 1943 \$	August 1943 \$
LIVE STOCK:			
Steers, good, per cwt.....	10.13	12.65	12.15
Cows, good, per cwt.....	7.78	10.20	9.90
Cows, common, per cwt.....	6.45	8.20	7.85
Canners and cutters, per cwt.	5.38	6.25	6.00
Veal, good and choice, per cwt.	13.85	14.95	15.60
Veal, common, per cwt.....	12.37	13.65	13.60
Lambs, good, per cwt.....	11.92	18.10	14.90
Lambs, common, per cwt....	9.92	16.10	11.25
Bacon hogs, dressed B. 1, per cwt.	16.25	17.10	17.10
ANIMAL PRODUCTS:			
Butter, per lb.	0.35	0.33	0.34
Cheese, per lb.	0.22	0.21	0.21
Eggs, grade A large, per doz.	0.40	0.40	0.46
Chickens, live, 5 lb. plus, per lb.	0.21	0.30	0.30
Chickens, dressed, milk fed A, per lb.	0.30	0.35½	0.35⅞
FRUITS AND VEGETABLES:			
Apples, Yellow Transparent, per bu.	2.00-2.25	—	(½ bu.) 1.50-2.50
Potatoes, Quebec No. 1, per 75 lb. bag	1.20-2.25	2.00	1.75-2.00
FEED:			
Bran, per ton	29.00	29.00	29.00



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

How Good Are You in an Emergency?

by G. A. LeBaron

Mark the following statements "True" or "False". In scoring allow 1 mark for each correct answer. A score of 23-25—Excellent. 21-23—Very Good. 19-21—Good. 17-19—Fair.

- 1. Nervous shock may cause fainting.
- 2. Elevate the head of a patient who is fainting.
- 3. Do not move a patient suffering from an epileptic convulsion.
- 4. In case of shock or collapse administer alcohol.
- 5. If a patient has swallowed lye, give vinegar to drink.
- 6. In case of electric shock, free victim from contact with bare hands.
- 7. In a drowning accident, continue to give artificial respiration for 4 hours, if necessary.
- 8. To cleanse a wound, scrub towards the wound.
- 9. When a tight bandage has been applied to check haemorrhage, do not loosen for some hours.
- 10. A pillow may be applied as a splint to support a broken limb.
- 11. Ordinarily it is not advisable to open a boil.
- 12. Apply sterile absorbent to a burn.
- 13. The best treatment for frozen nose — rub gently with bare hand.
- 14. When a pin has been swallowed, give a purgative.
- 15. Do not administer a purgative to a patient suffering from colic.
- 16. Give a baby with diarrhoea no food for about 12 hours.
- 17. The regular use of drugs in constipation will improve the condition.
- 18. Causing a person to vomit may stop hiccough.
- 19. Apply a lather of kitchen soap to parts affected with poison ivy.
- 20. Very young babies need to be kept warm.
- 21. All children under six years should rest at mid-day.
- 22. A baby should not sleep out of doors until six months old.

- 23. All discharges from a typhoid patient should be disinfected before disposal.
 - 24. Cavities in children's temporary teeth need not be filled.
 - 25. In giving a hot bath to a child in a convulsion, keep cold cloth on patient's head.
- (Answers to questions on page 25)

Health Insurance

by M. Elizabeth McCurdy

At no period in the history of Canada has the subject of the health of its people received the amount of study and attention it is doing at the present time. Both the Federal and the Provincial Governments are more vitally interested in the matter than ever before, although as a matter of fact the State has never been wholly indifferent to the health problems of the people, because it has been realized that the material, intellectual and spiritual advance of the nation would surely suffer as a result of neglect of the physical well-being of the people.

As it is now understood that it is beyond the scope of the individual to deal efficiently with the care of the health of the public, it is evident that the State must intervene; and because of the nation-wide scope of the problem the intervention of the Government must take on a character which will be more or less compulsory.

It is perhaps a debatable question whether Government direction of health measures should be in the hands of the Federal or the Provincial Governments. This problem might be conceivably solved by the Federal Government assuming control of general health measures, while the Provinces would legislate for specific causes of illness in their own territory. For example, tuberculosis is universally acknowledged as a great scourge in Quebec Province, while in the rest of Canada there are other diseases more prevalent. Diphtheria takes a serious toll in some cities in Quebec, far exceeding that of any other Province in the Dominion. Infantile paralysis, while it is found in most of the Provinces, has had many victims in the Western Provinces. Provincial health measures might be planned to meet these special needs, while those more common to the whole of Canada could be handled by the Federal Government.

The functions of Health Insurance as agreed upon by the International Labour Office are:

a. To provide preventive and curative care.

b. A benefit as compensation for loss of wages in case of illness. It may be said here that Maternity Allowances are an acknowledged part of any system of Health Insurance.

While no scheme of Health Insurance has as yet been perfected it may be inferred that any adopted plan will allow for a choice of physicians, free hospitalization and treatment, with curative and medical care. All this will take money, and so will have an influence on the nation's finances, raising problems which will require experienced hands and brain to meet.

The ideal is, of course, to provide medical care for every one, — not merely to treat and cure sickness, but examine and prevent its reaching a chronic state while cure is still possible, as well as to take measures in regard to sanitary conditions which will prevent recurrent epidemics of infectious diseases.

It is well known to every social worker that a low standard of health in a population is at least partly the result of a limited income on the part of the wage-earner. This being the case any system of health insurance to be effective must provide for adequate medical care for every member of the family no matter how small the amount of premium the wage-earner may be able to pay. This brings in the necessity of compulsory health legislation

in order that the merging of good and bad risks may provide the necessary finances.

The report of the Provincial Hospital Inquiry Commission enumerates several basis principles for an adequate system of Health Insurance. Four of these are:

- (a) "*Access by all the population to medical treatment regardless of poverty, financial difficulty, easy circumstances or riches: so, satisfaction of one of its essential needs;*
- (b) *Unified and consequently more effective control of public hospitalization services: thus, exercising this responsibility which is within the provincial jurisdiction;*
- (c) Establishment of *provincial standards* for admission to medical treatment, to the population's advantage;
- (d) *Safeguards of the home* and direct help to large families if the insurance system provides for a family premium instead of an individual premium. . . ."

A glance at these findings of the Commission will convince the interested reader of their importance and value in carrying out a system for better health conditions in Quebec. That they have been based on actual needs and conditions as discovered by the Commission is evident. That they will if carried out cause greatly improved conditions of health and well-being will only be proved by their adoption.

Advantages of Our Modern System of Education

by Agnes L. Patterson

Such a number of parents are prone to take the attitude "What - was - good - enough - for - me - is - good - enough - for - my - children" that a comparison of the old and new systems of education would seem timely.

The School Building

In a good many rural communities the old unattractive and tumble-down school house has been replaced by a new, trim-looking building. Viewed from the exterior, it shines resplendent in a new or next-to-new coat of paint. Along the south wall stands a row of five or six large windows. Usually the grounds are neatly kept, with a tree planted here and there, to add to the general attractive appearance.

On entering a modern, one-roomed school house, a visitor is impressed with the brightness of the classroom. This is due to two factors. Instead of the dark and dingy walls and ceilings of the old school, those of the new one have been painted in a light colour, usually cream or ivory. That row of windows previously seen from the outside adds further light. But why are they *all* along one wall? The old school had perhaps two windows on each side and two in one end. Those in the new school are so placed in order that the light, shining over the child's left shoulder, will throw the shadow of his hand and pencil away from his work, rather than on it. Then, too, having the windows

all on one side, without cutting up the other walls, leaves greater space for blackboards, bulletin boards and display of handiwork.

Off the classroom are one or more cloakrooms with adjoining lavatories. Where running water has not been available, hydroseptic tanks have been used with success, so that the old, unsanitary outhouses have been completely out-moded. Nobody can argue that this improvement, at least, has not been for the best.

The old box-stove that overheated those sitting near it and froze those poor unfortunates sitting in the remote corner of the room has gone. A small hot-air furnace with central heat, situated in the basement is all that is necessary to keep the school at an even temperature. The windows are made so that the outside ones can be opened top and bottom and the inside ones closed at the bottom and opened at the top. This provides an adequate amount of fresh air and no pupil is in danger of catching cold from sitting in a draught.

During the past few years many rural schools have been consolidated. This usually results in the building of a new school, of two or more rooms. Consolidation of schools means an increased educational advantage for pupils, as usually nine grades or more are taught. When

schools have not been consolidated and new schools have not been built, the old ones have frequently been repaired, repainted and many new improvements added.

Text books

Many a parent groans when Johnny comes marching home, after the first day at school, with his list of new books for the coming term. The books have been changed again and now he can't use those old ones of his sister Mary, who is a grade or so ahead of him. Yes, it is true, the textbooks are changed from time to time, and more frequently since the depression. But examine one of these new books and then ask yourself if it isn't all for the best.

If you like, start at the beginning and look at the Pre-Primer, the first book the child learns to read from at school. It has brightly coloured pictures depicting scenes from the little stories written underneath — yes! stories which the child can read shortly after he starts school. What a change and blessed relief from the old primers which read, with undying monotony: "I see Sam, Sam sees me, etc., etc." How we hated them!

Methods of Teaching

Psychologists tell us that a child remembers a greater per cent of what he does than what he sees or hears, but by appealing to all three senses, a greater permanency is obtained. Therefore, the Enterprise or Activity programme has been introduced in our schools. If the children are learning about Indians, for example, they may hear about them from their teacher, they may read about them from



Miss Barbara Fletcher, who graduated from Macdonald College in 1938, is the newly appointed Q.W.I. Demonstrator for the Province of Quebec.

books and then they might write stories about them and make a reproduction of an Indian village or some other phase of Indian life. Children love *doing* things and it is by appealing to their interests that the best results are obtained.

In our modern schools we have modern books in our libraries. Books like "Letters of Queen Victoria" which no child of school age would ever wade through, have been replaced by gaily illustrated stories and interesting instructive books, suitable for children.

Our educational system has made rapid strides forward during the past fifteen years, and will, we hope, continue to do so. We can help by supporting any new improvement which our school boards wish to make, knowing that it means better health and better education for our children.

Q.W.I. NOTES

The forms prepared for Branch Conveners of publicity have been issued throughout the Province. Attention is drawn to the fact that these forms are not to be sent to the Provincial Convener of Publicity, but to the County Conveners, who in turn select and write up important events and forward these in the shape of a brief report to the Provincial convener. With only one exception reports were sent in during the past month just as they were written by the Branch Conveners, necessitating this reminder. County Conveners please bear this in mind.

Argenteuil County.

Brownburg donated prizes to school children for knitted afghan squares — the same to be used for a quilt for the Junior Red Cross.

Frontier held a picnic meeting with sports for children.

Jerusalem and Bethany is making a "Get Well Apron" to raise funds for the sick committee.

Lakefield held a successful afternoon tea and home cooking sale.

Morin Heights raised \$3.85 at a White Elephant Sale — donated War Savings stamps as school prizes.

Mille Isles. The Boy Scouts of Tamaracouta Camp presented a play and musical programme for the benefit of this Branch's funds.

Pioneer had as guest speaker Dr. Grace Wales of Wisconsin University, Madison, who reviewed her study book "Democracy Needs Education".

Upper Lachute will continue to give a Regular Attendance Prize to Lachute High School.

Ditty bags are being filled by all branches.

Bonaventure County.

Two Branches in this County, New Carlisle and Port Daniel, report giving out yarn to be knit into articles for the 12 and 8 ditty bags these Branches are filling. New Carlisle presented an afghan and \$10. to the local Red Cross and \$10. to the Queen's Canadian fund, \$10. to the Prisoner's of War Fund, \$10. to the Navy League, and \$10. to the Greek Relief Fund. Port Daniel had an instructive address by Mrs. Mortimer on the censoring of letters. Mrs. C. E. Dow gave an interesting description of her visit to Ottawa to meet Madame Chiang-Kai-Shek. New Carlisle spent \$17.50 on school prizes, and Port Daniel offered prizes for the current school year to all local schools for improvement in writing.

Chateauguay County.

Aubrey-Riverfield had a paper on the origin of common vegetables and another on our Empire by Mrs. Bruce. This Branch is filling ditty bags, and donated \$8. to the British

Children's War Service Fund. Dundee Branch had a talk on Synthetic Rubber.

Compton County.

This County has an active branch at Canterbury, which includes in its war work donations of \$5. sent to each of the following funds: Queen's Canadian Funds, Greek Fund, Red Cross Fund, Bury Boys' Fund, Bury School Fair Fund. Ninety-five cans of rhubarb and jam were sent to Montreal Red Cross for overseas use. A social evening under the War Charities Act was held to raise funds.

Huntingdon County.

This County has undertaken a share in making ditty bags for the Navy league. Huntingdon Branch has been working on these, the members contributing personally to the supply needed. Prizes were offered again this year in the High School for household science work. A timely paper on the Secret of Repose was given by Mrs. John Henry, and Consumer's News was reviewed.

Shefford County.

Granby Hill Branch is filling four ditty bags. A picnic took the place of a meeting acceptably. The making of 12 quilts for the Red Cross is under way. A total of 4 sewn and 5 knitted articles were made for the Red Cross. A feature of the meeting was the presence of seven little boys and girls, all under six years of age. A box of food was sent to a Montreal Home. Warden held a sale of aprons to raise funds for the ditty bags being filled by the Branch. The annual picnic was successfully held, and funds raised for the Greek Relief Fund by a give-and-take sale. Each member brought a parcel for a basket, and took one from it, giving in return a cash contribution, which resulted in a fund of \$12. Readings on Greece and events from the war zone gave a literary turn to the meeting.

Richmond County.

Richmond Hill Branch is planning a quilt for the Red Cross, and voted \$8. for British Children's War Service Fund. \$10 to the Greek Relief Fund. Melbourne Ridge planned a supper for local boys in the Services, and distributed wool for ditty bags knitting. Postwar conditions were discussed by the members. Cleveland Branch brought in finished articles for the Red Cross and more material and wool given out. Sugar was supplied for jam for Britain.

Sherbrooke County.

Melby Branch voted \$3. for school prizes. Yarn was given out to knit sweaters for Navy ditty bags, each member donating fifty cents for its purchase. Ascot held a rummage sale to secure funds for ditty bags. Guests at the meeting were Mrs. W. G. Kuhring, Mrs. A. E. Abercrombie and Miss Alice Dresser, all members of the Q. W. I. Board.

An auction of vegetables in Orford Branch brought in money to purchase articles for ditty bags. Eight knitted articles for Red Cross were brought in.

Lennoxville Branch was pleasantly entertained at the lakeside cottage of a member, Mrs. R. E. Mosher and her

mother, Mrs. McClary. Mrs. W. G. Kuhring was present, and announced that Lennoxville Branch had won the first prize for the making of leather vests for the Merchant Marine, as offered by Mrs. Beddington, a Norse refugee. Lennoxville made 15 vests out of 91 made throughout the Province. Orford Branch made three of the larger knitted articles for the Red Cross, and had a talk on household science.

The quarterly meeting of Sherbrooke County was held in early August in the Y.M.C.A. in Sherbrooke, the newly elected President, Miss Doris Cilles presiding. Arrangements for the coming annual School Fair were completed, the Fair to be held in Lennoxville in September. A gesture of good-will to Institutes in Australia was planned in the sending of \$10. in garden seeds in the near future to be in time for the spring planting in October. A pleasing feature of the meeting was the presenting to Lennoxville Branch of a cash prize of six dollars for making the largest number of vests for Norse sailors and the Merchant Marine. Mrs. Abercrombie, President of Lennoxville Branch, received the prize for the Branch and promptly turned it back to the fund of the Norwegian Relief Committee to be used for comforts for the men.

Papineau County.

In Lochaber Branch "The work of the Women's Institutes" was reviewed in a paper by Miss Marion MacLachlan. An exhibit of articles over half a century old was a feature of the meeting. The Branch made plans for the annual Show of Flowers' vegetables and house plants.

Stanstead County.

Beebe had a well attended meeting in July. Members gave a timely wartime recipe in response to roll call. Prizes have been given in the school for a project sponsored by the Institute. Both teachers and pupils showed much interest and it was decided to continue the work next year. Fifteen dollars was donated to buy wool as this branch sends boxes at Christmas to all men and women in the services from their district, each box containing a pair of socks or gloves respectively. A quiz was much enjoyed.

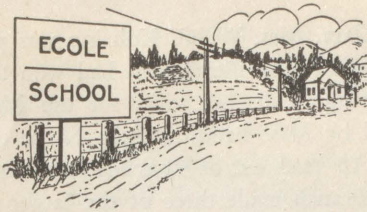
Dixville discussed a paper on what is needed in education for today.

Tomifobia featured a social evening open to the general public. A very successful National Film Board showing was sponsored by this Branch.

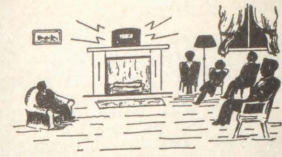
Way's Mills had an article on "Dominion Day" with an appropriate roll call.

Answers

- 1.—True. 2.—False. 3.—True. 4.—False. 5.—True.
- 6.—False. 7.—True. 8.—False. 9.—False. 10.—True (pin with safety pins tightly about limb. 11.—True. 12.—False.
- 13.—True. 14.—False. 15.—True. 16.—True. 17.—False.
- 18.—True. 19.—True. 20.—True 21.—True. 22.—False.
- 23.—True. 24.—False. 25.—True.



LIVING AND LEARNING



The Campus Camp

by Harry Campbell

In any truly Canadian gathering where people from the towns and villages meet and greet each other, the way to distinguish one person from another is to listen to the names of the town that each mentions. Thus at the annual gathering of Camp Macdonald from August 21 to September 6 the talk was filled with stories of Bathurst, Canso, Stanstead, Maria, of Mont Carmel, Wakefield, Mulgrove, Summerside and Huntsville. There were stories of people and places in points that reached from north of Kirkland Lake east to Sable Island.

From five provinces adult education leaders met for two weeks to explore intensively regions very remote from the site of the Camp itself at Ste. Anne de Bellevue.

These explorations were done in both French and English. The campers, as the members styled each other, utilized this occasion as much as possible to become acquainted with each other's problems in each other's own language. They were not always successful, and many left feeling that a greater amount of study must ensue in the coming year before the next camp brought them together again.

The daily work of the campers showed to what extent they were concerned with putting into practice the theories and plans they were discussing. After a week-end of getting acquainted, the campers had five days in which to conduct the first session of workshop and cross section groups. Both of these groups met daily, the first to build programmes of action and construct a framework of leadership skills that could be used on returning to town and city life. The second group, planned to be the meeting and exchange of the ideas of variously selected individuals, demonstrated that this exchange could be the most intensive part of the whole camp, but that such an exchange needed informality to make it most effective.

Recreation in the afternoons and evenings was used for demonstrations of the planning that the preceding workshops had done. Also resulting from the planning of

the programme were the first and second week-end periods, when the campers were joined by visitors for two day gatherings to discuss adult leadership of the present day and to examine wartime strategies for democracy and victory. To aid in the week-end meetings came groups of specialists from the fields of welfare problems, workers education, community organization and public information.

In addition to the groups of industrial personnel workers, librarians and community school leaders present, there were two groups of film projectionists of the National Film

Board rural and industrial film circuits. These two groups drew on the experiences of the other campers in reviewing and evaluating their adult education work. The camp programme was planned to include the showing of a number of British, American and Canadian documentary films during the day and out of doors in the evenings.

In a camp library, especially created by Gordon Webber of the Montreal Art Association, were displays in the form of discussion outlines, exhibits, posters, periodicals, radio programmes and

books. The library served as a focal point for gatherings and drew many comments for its attractiveness and suitability. Also in the library was a collection of handicrafts prepared under the direction of Dr. I. Crowell, Director of Handicrafts at Macdonald College.

The role of education consultant for the campers was taken by Dr. W. Hallenbeck, Administrator of Adult Education, Teachers College, Columbia, with Dr. A. S. Lamb of McGill as recreation consultant. The camp also drew widely on the special experiences of its members for practical aid in day-to-day management. In the belief that education has to be shared as well as studied, selection of a representative camp council was made to manage camp affairs.

In all the camp and individual projects, the willingness of the campers of Camp Macdonald to share a part of the project with one another was a sure sign that the theories being studied would find an outlet in educational leadership in the communities to which the campers returned.

Why We Fight

We of the United Nations are not making all this sacrifice of human effort and human lives to return to the kind of world we had after the last world war. We are fighting today for security, for progress, and for peace, not only for ourselves but for all men, not only for one generation, but for all generations. We are fighting to cleanse the world of ancient evils, ancient ills . . . We are fighting, as our fathers have fought, to uphold the doctrine that all men are equal in the sight of God.

Franklin D. Roosevelt, to the Congress of the United States, January 6, 1942.

The Memphramagog Camp

The third annual camp was held this year at Cedar Lodge, Lake Memphremagog. In addition to the adult campers who met to discuss Community School and Farm Forum plans, a group of young people met under the supervision of the Religious Education Council of Quebec for instruction in Young People's Work.

The campers put on a programme in the Community Hall, Georgeville. Arthur Packard, President of the Vermont Farm Bureau was the guest speaker. The campers who were taking recreation leadership put on the games and the Reverend Phil Nathams led the singing.

The largest representation at the camp was from Asbestos. Other groups attended from Waterville, Stanstead, Way's Mills, Barnston, Kingsbury, Sherbrooke, Sawyerville and other points. One of the most interesting features this year was a handicraft class led by Miss Georgie Mears of St. Andrews, N. B.

Mr. and Mrs. Waters cheered the camp this year as in previous years with their culinary skill and good natured tolerance of the vagaries of camp life.



Mrs. W. C. Jeffries sends in this photo of the members of the Fordyce Farm Forum at a picnic at Bondville, Que.

The Quebec Council of Community Schools met in special session at the MacKinnon Memorial Building, Sherbrooke on August 20 and 21. Nine schools were represented, the most distant point being Howick. The aims and philosophy of adult education were discussed at length and the future plans of the Council were worked out.

PARENTS AND CHILDREN

by Mary Avison

"It's the Law"

"School tomorrow, Son. Better get your books and pencils ready".

"But, Mum, 't isn't school till next week!"

"Oh, yes. School starts earlier this year: a new regulation."

"But *why*?"

"I don't know, dear. It's the law, that's all."

This answer may be good enough in a dictatorship, but in a democracy it is not enough. In a democracy children have a right to know the reasons for laws as well as the need to obey them. In a democracy parents have a responsibility to *find out* why, and to explain the reasons to their children, as well as to give active support to the carrying out of regulations.

This year the question of why school is earlier and why the school year is to be longer, will be raised round many family tables. Who made this law? And for whom? Are there any reasons against it as well as for it? What purpose does it serve? What exactly does it enforce? Ignorance even of the facts is so often the basis of our problems.

This year also, as parents of school-age children, we embark on the first year of compulsory school attendance in this province. A new law—a new regulation—a drastic change from long established custom, often demands of us adjustments in our own habits of thinking and doing that are not at once easy or agreeable. Sometimes we do not

even agree with the wisdom of the new regulation. More often it is what we have been waiting and working for.

In either case, we want our children to be law-abiding citizens and intelligent Canadians. Therefore we must teach them to find out first the facts, then to understand the reasons for such new laws. Finally we must help them to recognize their responsibility for obeying such laws while they are in force.

By encouraging our children to evade the law, whether it be school attendance, attendance at movies, or in other ways which we foolishly call "minor infringements", we encourage lack of respect for our community life. In this way lies chaos because it denies our need to live, not as individuals, but as members of a co-operating society of people.

Should we disagree with the wisdom of any law, we and they should know that there are lawful ways of working for a further change—not by disobeying or disregarding it, but by using our right to free speech, our responsibility to vote, our opportunity to urge our representatives in the government to make the changes we desire. These are the ways of democracy.

More and more today we as citizens are able to make our voice heard in the making of laws. Radio, discussion groups, the press, public opinion are stronger today than ever before. We must learn ourselves, and we must teach our children, the democratic way of forming judgments and making them known, thus taking a full share of responsibility as citizens.



THE COLLEGE PAGE

Prospects

By the time this issue is in the hands of our readers the School for Teachers will be again in session. There are a few more students in the course this year than last, but there are still far less than are needed if our schools are to be staffed with trained teachers in the coming years. Besides the small total numbers of teachers being trained during these war years, only a very small number of men are entering the teaching profession. Of the seventy-five candidates who have been admitted to the School for Teachers, seventy-three are women and the great majority of these live in Montreal of the suburbs.

In Household Science the situation is different. More applications have been received than it will be possible to accept, for our residence accommodation is limited this year and even by using a supplementary residence just off the campus we will not be able to admit all the girls who wish to become dietitians. We are not permitting any students who failed the first year last session to repeat the year, and new students are being selected on the basis of their qualifications.

At the moment of writing the situation in Agriculture is good. We are almost at the limit of accommodation but have room for a few more men in both the Degree and the Diploma course. What effect the new regulations concerning exemptions of University students from military service will have it is not possible to say. You will have noticed in the newspapers that the Director of National Selective Service has announced that some limitation is likely to be placed on the number of men that will be permitted to attend universities and colleges.

Last year all college students were granted postponement of military service provided they were up to the required standard in their studies; they all were given military training through the C.O.T.C. It seems probable that this general exemption will not be granted this year unless perhaps to students in science. We will await further announcement of the Government's plans with great interest.

We ran into W. G. Dore (M.Sc. 1935) at Granby the other night while attending the Pomological Meeting. Dore is at present engaged in making a survey to find where there are stands of milkweed in large enough quantities to make it worth while sending someone out to gather the leaves.

The Dominion Government has undertaken to collect fifty tons of dried leaves for experiments in making synthetic rubber. To get this amount of dried leaves it will be necessary to collect a considerably greater quantity of green leaves, for there will be a certain amount of loss of weight in drying.

The collecting of the leaves is being done by school children who are paid three cents a pound for all they can gather.

A course in tropical medicine which lasted two weeks was given at the College last month under the direction of Dr. T. W. M. Cameron, Director of the Institute of Parasitology. The students were Army Medical Corps officers.

The course will be given again in October, and at regular intervals thereafter.

Squadron Leader Phil Archer, D.F.C., a graduate of 1940, was posted missing some time ago. The German authorities have now notified the Red Cross that he was killed in air operations on June 17, 1943.

Lt. Jack Horn, who spent a year in the degree course in 1939-40, was killed in action in Sicily during the recent campaign.

P/O John Evelyn Birkett, R.C.A.F., a Diploma graduate of 1941, was killed in June 1943 while flying to Labrador.

F/O Garfield W. Clark, R.C.A.F., Teachers 1932, was killed in action overseas in January 1943.

George Matthews, R.C.A.F., Teachers 1939, was killed in air operations over Germany in February 1943.

Flt/Sgt. David May, R.C.A.F. a graduate of the Advanced Diploma Course in 1938, was killed in a flying accident at Markland, N.S., on January 8, 1943.

Fall Tillage and Weed Control

Fall tillage is beneficial in controlling weeds on stubble land. Shallow after-harvest tillage loosens the soil and covers weed seeds which ripened along with the grain crop and shattered on the ground during harvesting operations. Many of these weed seeds such as stink weed, mustard, shepherd's purse, lambs' quarters, pig weed, wild buckwheat, and others will germinate when covered with soil, and are killed by low winter temperatures or are destroyed by subsequent cultivations.

Many weed seeds, such as wild oats, do not germinate well until they have passed through a winter. Shallow fall tillage covers such weed seeds with soil and encourages their germination when spring temperatures and moisture conditions are favourable. While shallow, early spring tillage has a similar effect, the shallow fall tillage is preferable as it lessens spring work and also is more effective in promoting early spring germination of weed seeds.

Deep fall tillage is an important factor in the control of perennial weeds such as Canadian thistle and quack

FAIRBANKS-MORSE FARM EQUIPMENT



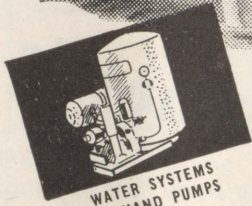
Serving The Hard-Pressed Farm Front

The Canadian Fairbanks-Morse Company and F-M dealers are doing all they can to keep much needed equipment moving up to the important farm front. As limited wartime supplies become available they are rushed out to *all* parts of the country in proportions based on normal requirements.

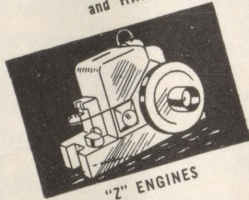
If you need new equipment, see your F-M dealer. If he can't get what you want immediately, he will put you down for the first available. Meanwhile you can get replacement and repair parts without restrictions, and the F-M dealer's mechanical experience and shop facilities are at your service to help keep your present F-M equipment in good working order.

The CANADIAN FAIRBANKS-MORSE Company, Limited

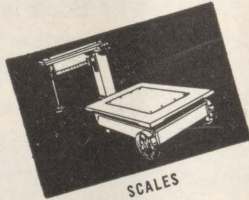
Saint John - Montreal - Toronto
Winnipeg - Vancouver



WATER SYSTEMS
and HAND PUMPS



"Z" ENGINES



SCALES



WINDMILLS
and WIND CHARGERS



ELECTRIC LIGHT PLANTS
and BATTERIES



HAMMER MILLS
and GRAIN GRINDERS

REED'S

METAL ROOFING

Our FREE suggestions may help make your present metal roof last longer. Write today!

GEO. W. REED & CO. LTD.
4107 Richelieu Street Since 1852 Montreal
Associated with Metallic Roofing Co. Ltd. Toronto

Support The Victory Loan

grass. It has been demonstrated repeatedly that two fall plowings will substantially reduce stands of deep rooted perennials such as thistles. A combination of frequent tillage, dry weather and freezing fall temperatures will thin out and weaken stands of

creeping rooted weeds, such as quack grass.
Fall tillage reduces the amount of spring work necessary to prepare a seed bed, which in itself is an important factor under prevailing labour conditions.

Canned Goods In Storage Show Big Drop

With a short crop of many fruits in prospect for this year, a Dominion Bureau of Statistics report shows that July 1 holdings of canned fruits by canners, wholesale dealers and chain store warehouses were substantially lower than on the same date last year.

Holdings of canned applesauce totalled 590 dozen cans against 39,116 in 1942, apricots 8,155 dozen against 28,204 dozen, blueberries 754 dozen against 8,773 dozen and peaches 168,820 dozen against 351,761 dozen.

Rhubarb holdings were higher at 27,582 dozen cans against 2,889 dozen last year.

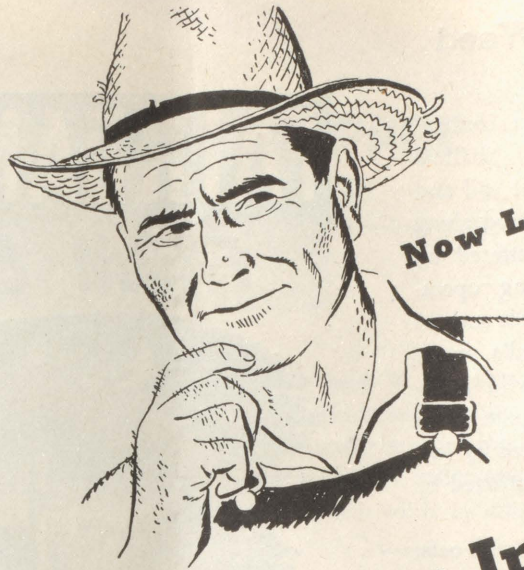
Total holdings of canned fruit were 434,550 dozen cans this year against 1,117,320 in 1942.

Canned vegetables totalled 2,203,585 cans against 3,469,294 on July 1, 1942.

Blindness in Horses

If the eyelids of any horse on the farm appear swollen or tender, it may be symptoms of a disease known as periodic ophthalmia through which thousands of horses have lost their eyesight in the past few decades. The veterinary authorities of the Dominion Department of Agriculture believe that many horses are prematurely blinded by this disease because the owners do not recognize the symptoms in time. The following protective steps should be taken when one or more of the horses on the farm show symptoms of eye trouble; first, have an immediate veterinary diagnosis made; second, keep the affected horses away from the healthy animals, and third, do not breed animals which have this disease.

Provincial inspectors report that in one county in Quebec, Soulanges, there are on the average 10 acres per farm which could not be seeded this year on account of excessive moisture.



What is my Income?

This year thousands of farmers must pay income tax for the first time. Under such circumstances it is vitally important to maintain accurate records of farm costs and revenue, in order that income may be accurately determined.

The Royal Bank Farmers' Account Book is exactly what you need to keep accurate records of farm operations. It has been used by progressive farmers for years for just such a purpose. A copy is yours for the asking at any branch of the bank.



**THE ROYAL BANK
OF CANADA**



*Buy
Victory
Bonds*

STRIPPINGS

by Gordon W. Geddes

Well, our litter of pigs got to market at six months old. Not only that but they were too heavy as well. We'd been complaining that they grew slowly and hadn't time to weigh them. At that age we weighed and found them from 196 to 232 lbs. They couldn't go to market for six days so the heaviest ones were separated and put on bare maintenance rations. It was a good thing because the heaviest one made 185 on the rail. A pound more would have meant a \$3 cut. Two of the younger ones we bought also went at two weeks below six months. One of them was too fat even though he only made 146 on the rail. Four more of them will go at six months but the two 'runts' will be with us for some time. Anyway they can take care of the buttermilk.

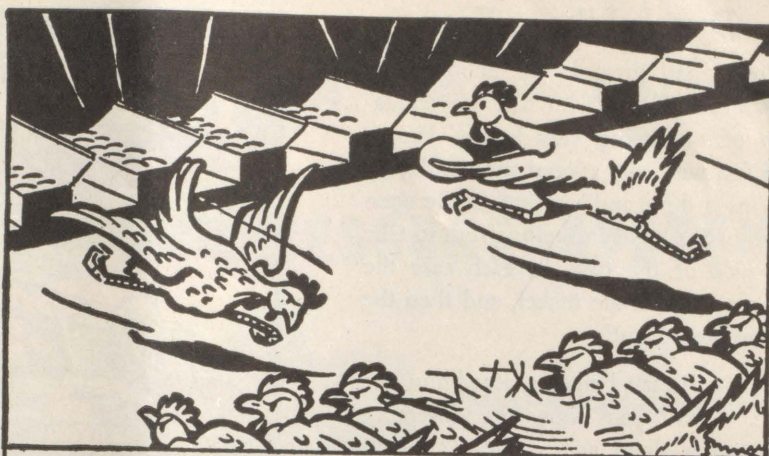
The grading was not good, only one A, and that was the 196 lb. one. The others were rather too fat and heavy. Co-op shipments have stopped for lack of a truck but a local driver takes them in for \$1.25 per head, right from the pen when the roads are open, which is pretty handy. They brought an average of \$27.50. Eddie helped to weigh them again but he missed the loading. Maybe he'll have better luck on the next lot.

Anyway he didn't miss being present for the arrival of our second litter from the sow. They were kind enough to come in the afternoon. Katrinka did much better this time. Not only was she as quiet as could be but she also came across with a litter of twelve. She sat on one before it was a day old but the others have passed three weeks. They've had their third dose of iron and are eating from their private trough. Eddie was there for all three doses so Dot got a vacation. Maybe we really won't have to buy any pigs this time. But say, it seemed like a lot of pigs when we had 25 for me to feed alone. It was a temptation to go to the store and ask for hog feed instead of mixing our own. Still if one has home grain to feed there still needs to be some mixing done.

Had another heifer calve just at that time, too. She presented us with a heifer calf which was very welcome since they have been scarce. The fly in the ointment was that she made the presentation in the pasture. She did stay out of the woods but I didn't expect it so looked there first. But she picked the most distant part of the pasture and I had to carry the squirming thing up all the hills. I tried the Fireman's Lift and everything else but it struggled like a drowning person. I didn't dare to sock it (as Eddie says) for fear I couldn't bring it round again. However, we finally got there and both of us are still alive.

Last winter I was telling our agromone, Wallace Robinson, that I'd intended to try some borax on alfalfa as I read that it was helpful where there was boron deficiency. That exists here because it takes borax to make table turnips good. A few days ago a bulky envelope arrived in the mail. Wallace had sent several issues of 'Better Crops with Plant Food'. Each contained a marked article on Boron deficiency. Haven't had time to read them all yet but apparently borax does great things for alfalfa in the United States. It not only increases the yield but it makes the stand last longer and increases the

(Continued on inside back cover)



Keep **YOUR** hens on **ALL-OUT** production
... give them feeds containing
"VIDOVA"

ONE SURE WAY to keep up egg production during the coming fall and winter is to start now giving your hens a feed containing "Vidova".

"Vidova", a concentrated source of Vitamin "D", increases egg production naturally by building up the health of poultry and giving them the supply of "sunshine" vitamin they need to become champion layers.

Many leading feed manufacturers now add "Vidova" to their regular feeds, and ranchers who raise their flocks on these "Vidova" fortified feeds are more than satisfied with results.

So next time you buy, tell your feed dealer you must have a feed containing "Vidova"—they cost no more than ordinary feeds.

VITAFEED CONCENTRATES LIMITED

21 King St. E. • Toronto

Sole agents for Quebec Province - Viobin (Canada) Limited, 637 Craig St. W., Montreal

("Vidova is a product of the research laboratories of Charles E. Frosst & Co. and is guaranteed to contain 240,000 A.O.A.C. units of Vitamin D per gram.")

ACCEPT ONLY FEEDS CONTAINING
"VIDOVA"
(VITAMIN D—THE SUNSHINE VITAMIN)

Dumb Like a Fox

In a small town in the South, there was a colored lad who had the reputation of not being very bright. People had fun with him several times a day by placing a dime and a nickel on the open palm of his hand and telling him to take his pick of the two. In each case the lad would pick the nickel, and then the crowd would guffaw.

A kind-hearted woman asked him one day: "Don't you know the difference between a dime and a nickel? Don't you know the dime, though smaller, is worth more?"

"Sure, I know it," he answered, "but they wouldn't try me out on it any more if I ever took the dime."

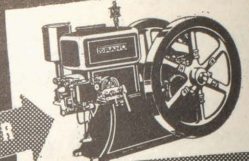
Keen Interest in Victory Gardens

The Quebec radio station CHRC announced during the summer a contest for the best Victory Gardens owned by its listeners, with a number of prizes, first prize being a cash award of one hundred dollars. At the time of going to press there were 2,200 entries in the contest, clear evidence that there are many enthusiastic gardeners in the neighbourhood of Quebec City.

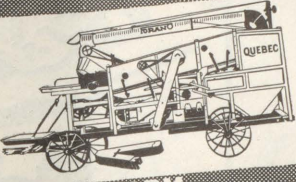
In the Montreal area a similar contest was sponsored by the Montreal Daily Star.

FORANO

The stationary Gasoline Engine is gradually regaining the confidence of the farmers because time has proved that slow speed stationary engines last a lifetime without trouble. The Forano is an old timer still on the job.

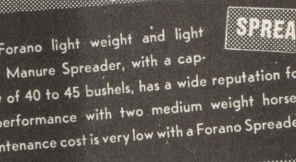


MOTOR

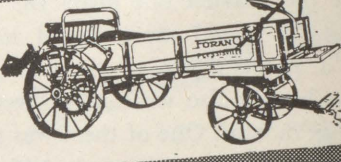


THRESHER

The Forano-Quebec Thresher is a well known machine, long appreciated for its simplicity, performance and low price; characterized by a patented screen made in two inversely operating parts—the only machine of its kind.

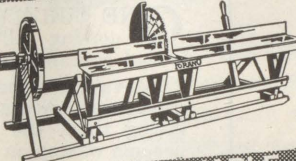


FARM

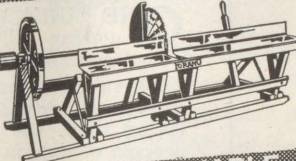


SPREADER

The Forano light weight and light draft Manure Spreader, with a capacity of 40 to 45 bushels, has a wide reputation for its performance with two medium weight horses. Maintenance cost is very low with a Forano Spreader.

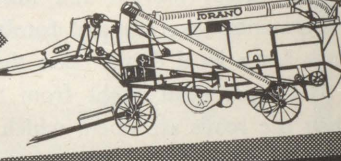


SPECIALTIES



CORDWOOD SAW FRAME

Buy a Forano Cordwood Saw Frame. It is simple— heavy — well made and will last a lifetime.



THRESHER

The Forano All-Steel Thresher is our pride. Customers like it for three reasons: Firstly, for its particularly good performance, quality and quantity; secondly, because it is a well built machine; thirdly, because it has a good appearance.



ROOT CUTTER

Forano Root Cutter can be driven by hand or motor. It is roller bearing mounted, rendering it easy to operate.

FREE CATALOGUE ON REQUEST

THE PLESSISVILLE FOUNDRY

PLESSISVILLE P.Q., CANADA

Makers of FORANO Products since 1873

SUBSCRIPTION FORM

Please send the Macdonald College Journal for two years to

Name
 Print name and address clearly

Address

The Subscription Fee of \$1.00 for 2 years is enclosed.

(The price for a 1 year subscription is 50c)

FILL OUT THIS FORM AND MAIL IT WITH YOUR SUBSCRIPTION TO:

THE MACDONALD COLLEGE JOURNAL
 MACDONALD COLLEGE, QUEBEC

yield of seed on fields kept for that purpose. It helps to prevent alfalfa 'yellows' too. I didn't know this was a recognized ill with the crop but ours sure had it last fall. It doesn't usually show in the first cutting but does in the second. Leaves turn yellow or red and the growth is stunted. Down there they sure pile on potash on the alfalfa too. But an annual application of 300 lbs. per acre gave $3\frac{1}{2}$ tons more alfalfa per acre for a cost of \$6 per year. And the treated stand was still ready to grow more crops while the rest was in poor shape.

Please Drive Carefully

Dear Driver:

Today my daughter, who is seven years old, started talking about the coming days of school. She wondered who would be sitting in front of her this year, and whether or not there'd be that boy across the aisle who made funny faces. And she hoped that she didn't get that teacher who has eyes in the back of her head. We talked about a lot of things . . . tremendously vital, unimportant things; then with a kiss on my cheek . . . off she went to bed.

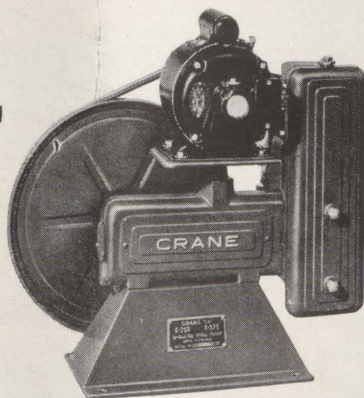
She's upstairs now . . . sound asleep, with "Princess Elizabeth" (that's her doll) cuddled in her right arm. You fellows wouldn't hurt her, would you? You see, I'm her daddy. When her doll is broken or her finger is cut, or her head gets bumped, I can fix it—but when she starts to school, when she walks across the street, then she is in your hands.

She's a nice kid. She can run like a deer and darts about like a chipmunk. She likes to ride horses and swim and hike with me on Sunday afternoons. But I can't be with her all the time—I have to work to pay for her clothes and education. So please help me look out for her. Please drive carefully, please drive slowly past the schools and intersections—and please remember that children do run from behind parked cars.

Please, don't hurt my little girl!

YOUR NEIGHBOR.

S-t-r-e-t-c-h your labour supply with a **WATER PRESSURE SYSTEM**



**PUMPS ARE
AVAILABLE FOR
ESSENTIAL
FARM WORK AND
MARKET GARDENING**

Plentiful water, "on tap" for both farm and domestic needs, means a big saving in manpower, time and money. Chores get done faster—you are able to step up still further the production of the food so urgently needed to speed the victory. The line of water pressure units available from Crane includes pumps in a wide range of sizes, suited to various requirements—fresh flow, deep well or shallow well.

For further details, together with necessary priority form, mail the coupon below.

CRANE

CRANE LIMITED: HEAD OFFICE: 1170 Beaver Hall Sq., Montreal

CRANE LIMITED
1170 Beaver Hall Sq., Montreal

Please send me further information on your PUMPS, together with Government priority form.

Name.....

Address.....

WARNING

COAL WILL BE SCARCE NEXT WINTER !!!

Prepare your home now for adequate warmth with smaller fuel consumption

TO SAVE COAL CHECK THESE POINTS



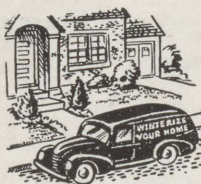
✓ HOW TO GET MORE HEAT

Pipes and furnaces must be clean, and grates in good order. If one or two rooms are hard to heat, you are wasting fuel. A minor adjustment can probably remedy this. Have a competent man check your heating system, and make necessary repairs. Insulate your furnace and pipes when necessary.



✓ HOW TO AVOID HEAT LOSSES

Storm windows and doors must fit snugly and be weatherstripped. Lack of storm windows can cause as much as 20% heat loss. Caulking should be done around windows, doors and in cracks in brick work (some hardware stores have caulking guns for rent). Broken glass should be replaced, and loose panes puttied. Small expenditures on such work will save much fuel.



✓ HOW TO SAVE STILL MORE

You can save fuel and money by having your home properly insulated. It is a proven fact that in many homes lack of adequate insulation (including storm windows) results in unnecessary consumption of fuel—up to as much as 50%. Watch for later instructions on how to fire your furnace properly.

HAVE YOUR HOME INSPECTED FOR HEATING AND INSULATION DEFECTS

Get advice now! Skilled workmen and supplies are scarce. If you delay in getting your home ready for winter you may not be able to get the services you need.

Save one ton in five

MS10W

THE DEPARTMENT OF MUNITIONS AND SUPPLY

HON. C. D. HOWE, Minister